

Innes National Park Management Plan

Southern Yorke Peninsula

June 2003



Government
of South Australia

DEPARTMENT FOR
environment
and heritage

Our Parks, Our Heritage, Our Legacy

Cultural richness and diversity are the marks of a great society. It is these qualities that are basic to our humanity. They are the foundation of our value systems and drive our quest for purpose and contentment.

Cultural richness embodies morality, spiritual well-being, the rule of law, reverence for life, human achievement, creativity and talent, options for choice, a sense of belonging, personal worth and an acceptance of responsibility for the future.

Biological richness and diversity are, in turn, important to cultural richness and communities of people. When a community ceases to value and protect its natural landscapes, it erodes the richness and wholeness of its cultural foundation.

In South Australia, we are privileged to have a network of parks, reserves and protected areas that continue to serve as benchmarks against which we can measure progress and change brought about by our society. They are storehouses of nature's rich diversity, standing as precious biological and cultural treasures. It is important to realise that survival of species in 'island' reserves surrounded by agriculture or urban areas is uncertain, and that habitat links between reserves are essential for their long-term value as storehouses.

As a result of more than a century of conserving nature and cultural items, we possess a "legacy" which is worth passing on to future generations.

There are twelve essentials for the protection of our park environments:

- Recognition that a primary purpose of our national parks system is to conserve the wide diversity of South Australia's native plants and animals and to improve their chances of survival through active wildlife management.
- Recognition that all our parks also protect cultural legacy of relevance to both Indigenous and Non-Indigenous people, and that Indigenous people have had cultural association with this land over many thousands of years.
- Freedom to improve our legacy by making additions to the park system -- enhancing existing protected areas and including landscapes and environments containing native plant and animal communities not already protected.
- Realisation that the continuance of our native species cannot be dependent upon island reserves alone but should be provided for in a regional landscape with linkages between natural areas to enhance the prospect of long-term survival.
- Recognition that there is potential for new and useful substances or genetic material to be found in native plant and animals.
- Recognition of economic and social benefits for local communities, which arise from the presence of national parks in their region and the consequent opportunities to offer service for visitors.
- Development of close relationships with the community, so that there is an understanding of the role of parks in conserving native wildlife, cultural items and in providing recreational opportunities.
- Promotion of community participation in making decisions on the management of parks, so that a sense of community ownership of the reserve system may be fostered, and so that parks and surrounding landscapes are managed in harmony.
- Appreciation that those qualities presented to visitors for their use and enjoyment in parks, should be the diversity of plants, animals and landscapes for which the parks were set aside.
- Understanding that development in a park should proceed where it :
 - contributes to the conservation of the environment;
 - provides for better appreciation of the need to conserve the diversity of plants and animals;
 - protects wildlife habitats and landscape (especially Vulnerable and threatened species or communities); and
 - is necessary for management of the park.
- Reassurance, in support of our cultural character, that natural areas can survive even though those who care deeply for their survival may never visit them.
- Provision of valued natural areas for people to be at one with nature and for personal and spiritual refreshment.

INNES NATIONAL PARK MANAGEMENT PLAN

Southern Yorke Peninsula

South Australia

June 2003

Department for Environment and Heritage



Government of South Australia

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FOREWORD

This management plan sets out objectives and actions for Innes National Park. It has been produced in accordance with the *National Parks and Wildlife Act, 1972*. The park is of considerable conservation value and is managed by the Department for Environment and Heritage (DEH).

Located on the southern tip of Yorke Peninsula, South Australia, Innes National Park incorporates the largest remnant of native vegetation on the Yorke Peninsula, including 115 plant species of conservation significance. The park provides essential habitat for the threatened Western Whipbird and Malleefowl, and conserves important intertidal ecosystems, beaches and dunes, coastal heathlands, mallee woodlands, salinas, and small off-shore islands.

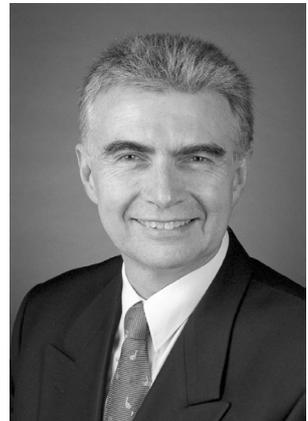
Innes National Park attracts large numbers of visitors and makes a significant contribution to the regional tourism economy. Recreation opportunities include fishing, surfing, diving, camping, walking and exploring historic sites. The park conserves extensive aboriginal cultural heritage sites and remnants of South Australia's maritime and mining past. Many of these sites include interpretive signage, which provides visitors with an important insight into South Australia's cultural heritage.

Management intends to balance recreation and tourism with the primary aim of biodiversity conservation, as well as ensuring that cultural heritage sites are preserved and, if necessary, restored. The management objectives for Innes National Park have not been prepared in isolation, but rather in consultation with other agencies and community groups. The location of other DEH reserves and areas of remnant vegetation have also been considered to ensure that Innes National Park is managed in a regional context.

The plan of management for Innes National Parks is now formally adopted under the provisions of section 38 of the *National Parks and Wildlife Act, 1972*.



JOHN HILL
MINISTER FOR ENVIRONMENT AND CONSERVATION



SYNOPSIS

This management plan is for Innes National Park, located on the southern tip of Yorke Peninsula, South Australia. The 9,232 ha park was first proclaimed in 1970, with additions in 1977, 1984 and 1993. The park was proclaimed to conserve important habitat for the western whipbird, but park managers are also responsible for managing the substantial tourist use.

Innes National Park incorporates the largest remnant of native vegetation on the Yorke Peninsula, with the majority of Yorke Peninsula cleared for cropping and grazing. The park, together with numerous properties under Heritage Agreement and nearby Warrenben Conservation Park, represents a large reservoir of natural genetic material within the region. It is therefore critical to the conservation of regional biodiversity, and fundamental to the establishment and maintenance of a comprehensive and representative reserve system in South Australia.

The IUCN classification is Category 2 'National Park', which is described as a protected area managed mainly for ecosystem protection and recreation. The park contains 115 plant species of conservation significance, including 4 at a national level listed under the *Environment Protection and Biodiversity Conservation Act 1999*. The park provides specialised habitats for fauna species of conservation significance, including the western whipbird and mallee fowl. Other biodiversity values include intertidal ecosystems, beaches and dunes, coastal heathlands, mallee woodlands, salinas, and small off-shore islands.

In addition to unique natural resources and superb coastal scenery, Innes National Park has extensive cultural resources, including Aboriginal cultural heritage sites and sites remaining from its mining and maritime past.

The park attracts up to 200,000 visitors each year and is recognised as an important contributor to the regional tourism economy. Recreational opportunities include fishing, surfing, diving, camping, walking, and exploring historic sites.

Administration of the park has focussed on visitor management, with biodiversity maintained primarily through restricting public access from sensitive areas. However, direct management of threatening processes is required, involving consistent data collection of ecological management requirements for species and habitats of conservation significance.

Identified threatening processes on biodiversity include ongoing pressure on soil and vegetation from visitors and vehicles, coastal dune instability and the potential for the spread of proclaimed weeds. The continued and increasing popularity of Innes National Park as a holiday destination requires re-examination of management strategies to balance public use and the protection of the park's natural and cultural values.

To achieve this balance, the following key actions are recommended:

- Establish a long term strategy and prioritised management program for the effective inventory, monitoring and management of the park's natural and cultural resources.
- Extend and upgrade the Stenhouse Bay campground.
- Establish and maintain a system of access roads and carparks, thereby providing the major coastal recreation sites with safe and reliable access for cars, buses and vehicles towing caravans and boats.
- Redesign the Pondalowie Bay campground to include a standing area for boats, additional toilets, showers and carpark facilities. Construct signed walking trails to both beaches and bitumen-seal the Pondalowie terminus carpark.

TABLE OF CONTENTS

FOREWORD i

SYNOPSIS ii

1 INTRODUCTION 1

2 MANAGEMENT FRAMEWORK..... 2

 2.1 Park Classification 3

 2.2 Government Policy and Legislation 3

 2.3 Native Title 4

 2.4 Environment Protection and Biodiversity Conservation Act 1999..... 4

3 MANAGEMENT CONTEXT 5

 3.1 Purpose of Reserve 5

 3.2 Location and General Description 5

 3.2.1 Climate 8

 3.3 Regional Setting..... 8

 3.4 History of Reserve Management 10

 3.5 Existing Management Arrangements..... 11

 3.6 Management Philosophy and Strategic Directions 11

4 MANAGEMENT PRESCRIPTION..... 13

 4.1 Zoning..... 13

 4.2 Natural Resources..... 16

 4.2.1 Geology and Landform..... 16

 4.2.2 Soils 17

 4.2.3 Native Vegetation..... 17

 4.2.4 Native Fauna..... 21

 4.2.5 Introduced Plants 23

 4.2.6 Introduced Animals 24

 4.3 Cultural Heritage 25

 4.3.1 Aboriginal Heritage 25

 4.3.2 Colonial Heritage 27

 4.4 Fire Management 30

 4.5 Infrastructure and Built Assets 31

 4.6 Recreation and Tourism..... 32

 4.6.1 Visitor Use..... 32

 4.6.2 Vehicle Access 32

 4.6.3 Boat Access 33

 4.6.4 Horse access 34

 4.6.5 Walking Trails..... 34

 4.6.6 Visitor Facilities 35

 4.6.7 Entry, Camping and Accommodation Fees..... 40

 4.6.8 Information and Interpretation 42

 4.7 Commercial Activities and Other Landuse..... 42

 4.7.1 Tour Operators 42

 4.7.2 Stenhouse Bay General Store, Tavern and Hall 43

 4.7.3 Bee Sites 43

 4.7.4 Leases and Licences 44

 4.7.5 Electricity, Telecommunications and Water 44

 4.7.6 Marine Navigation Aids 45

 4.7.7 Mining Leases 45

 4.8 Management Arrangements..... 46

 4.8.1 Partnerships and Cooperative Management 46

 4.8.2 Community and Volunteer Involvement 46

 4.9 Future Directions 47

 4.9.1 Additional Land..... 47

5	SUMMARY OF MANAGEMENT ACTIONS	48
6	REFERENCES AND BIBLIOGRAPHY	56
	APPENDIX A : LEGISLATION, CONVENTIONS AND AGREEMENTS	57
	APPENDIX B : INNES NATIONAL PARK – LAND TENURE HISTORY	58
	APPENDIX C : INNES NATIONAL PARK – NATIVE PLANT SPECIES	61
	APPENDIX D : INNES NATIONAL PARK – NATIVE BIRD SPECIES.....	70
	APPENDIX E : CONSERVATION STATUS CODES.....	73
	APPENDIX F : KANGAROO COUNTS 1978-1997	75

LIST OF FIGURES

Figure 1: Location	6
Figure 2: Features	7
Figure 3: Zoning	15
Figure 4: Native Vegetation	19
Figure 5: New Park Headquarters and Main Entrance	37
Figure 6: Stenhouse Bay Precinct.....	38

LIST OF TABLES

Table 1: Proposed Provision of Visitor Facilities.....	41
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ABBREVIATIONS AND GLOSSARY OF TERMS

ALRM:	Aboriginal Legal Rights Movement
DEH:	The Department for Environment and Heritage
DEHAA:	The (former) Department for Environment, Heritage and Aboriginal Affairs
DENR:	The (former) Department of Environment and Natural Resources
DAARE	The Department for Aboriginal Affairs and Reconciliation
GIS:	Geographic Information System
IBRA:	Interim Biogeographic Regionalisation of Australia
IUCN:	The International Union for Conservation of Nature and Natural Resources (The World Conservation Union)
PIRSA:	Department of Primary Industries and Resources SA

ACKNOWLEDGEMENTS

This plan of management was compiled by staff of the Yorke District and the Reserve Planning Section, Department for Environment and Heritage.

Valuable assistance received at various times from other groups and individuals who provided information or comments is gratefully acknowledged.

1 INTRODUCTION

This document is the adopted management plan for Innes National Park. The reserve is located on the southern tip of the Yorke Peninsula, which falls within the Yorke Mid-North Region of the Department for Environment and Heritage. The plan outlines proposals to effectively conserve the natural and cultural values of the parks, while providing for public use and enjoyment.

The first management plan for Innes National Park was adopted in 1982 and sought to establish improved visitor facilities to provide quality visitor experiences, while maintaining park values. Stenhouse Bay precinct was identified as the 'gateway' to Innes National Park due to its location and opportunity to upgrade existing facilities. Developments and infrastructure have continued to progress and remain a key management objective of this plan.

This management plan has been prepared in accordance with the *National Parks and Wildlife Act 1972*. Section 38 of the Act states that a management plan is required for each reserve. A management plan should set forth proposals in relation to the management and improvement of the reserve and the methods by which it is intended to accomplish the objectives of the Act in relation to that reserve.

Upon completion of a draft plan an announcement is made in the Government *Gazette* and the plan is placed on public exhibition for three months. During this period, any interested person may make submissions which are then referred, with the plan, to the South Australian National Parks and Wildlife Council for their comments and suggestions. Submissions must be in writing; e-mail submissions are acceptable.

Having formal community input into public land management is a requirement of the legislation and supported by park managers. The draft plan for Innes National Park was released for public exhibition in July 2001. At the close of the comment period, 5 submissions had been received. Issues raised in submissions included concern regarding the appropriateness of various proposals for visitor facilities development, horse access, support for the development of partnerships and cooperative management, corrections/addenda to species lists, pest plants and animals. All these concerns were considered by the Yorke Consultative Committee before going to the SA National Parks and Wildlife Council.

The Minister, after considering all representations, may then adopt the management plan with or without alterations. In the case of the management plan for Innes National Park, a number of alterations have been incorporated as a result of the community consultation process. Notice of such official adoption is published in the Government *Gazette* and copies of the final plan are made available for sale to the public. They may also be viewed on the departmental website http://www.environment.sa.gov.au/parks/management_plans.html.

Once a plan of management is adopted, its provisions must be carried out in relation to the reserve in question and no actions undertaken unless they are in accordance with the plan. However, the Act does make provision for amending adopted plans and this process is similar to the one described above.

2 MANAGEMENT FRAMEWORK

Management planning is a statutory requirement for all reserves prescribed in S38 of the *National Parks and Wildlife Act 1972* and S31 of the *Wilderness Protection Act 1992*. The management planning process is but a small part of a much larger, state-wide hierarchy of management. This is directed from the highest level by state government policies and departmental priorities and implemented, on a day to day basis, at a regional and district level.

Management plans provide a ministerially endorsed and legally binding framework for the use and management of *National Parks and Wildlife Act* reserves. They are intended to accommodate anticipated trends and community aspirations over a five to ten year time frame. The legislation anticipates that management plans will be formally reviewed from time to time, but there are no prescribed time limits for this to occur.

DEH regional staff have been assigned primary responsibility for preparing management plans and undertaking the associated community consultation process. A standard management planning process is mandated, to ensure that all statutory obligations are met.

Management plans define what is considered acceptable activity in a reserve while still allowing park managers some flexibility in day to day decision-making. They should be proscriptive enough to prevent deleterious activities, or inappropriate developments, taking place. They are not intended to be comprehensive compendiums of resource information, nor are they heavily prescriptive action statements; other documentation covers those aspects. They do however, identify the key values of reserves, the appropriate utilisation and the major issues of concern requiring action, thereby providing the community (and park managers) with a blue-print of how public land is going to be used and managed.

Management plans often foreshadow the preparation of 'delegate' plans to achieve the proposed objectives. Delegate plans are detailed, non-statutory action plans that provide additional details on how the actions, listed in the management plan, are to be progressed. With regard to Innes National Park, the development of a Bushfire Prevention Plan, Interpretation Plan, Visitor Facilities and Services Plan, Walking Trail Plan and an Inneston Conservation Plan are proposed. Although such in-house action plans are not subject to the same statutory processes as are formal management plans, DEH will continue to involve relevant stakeholders, other agencies and community groups in their preparation and implementation as part of the on-going management of the park.

Each year park managers, taking regional and district priorities into account, draw up work programs to implement some of the actions proposed in management plans. Whether these projects are actually undertaken is determined by, and subject to, the availability of resources (eg staffing and funding) and to any requirements of the Minister for Environment and Conservation and the department's Chief Executive, who take a state-wide overview in setting departmental priorities and allocating resources.

2.1 Park Classification

Parks are established for the conservation of biodiversity and cultural heritage and the environmentally responsible use of our natural resources. The classification of parks provides a general statement of purpose for which the area was acquired.

Classifications under the *National Parks and Wildlife Act 1972*, the *Crown Lands Act 1929* or the *Wilderness Protection Act 1992* are as follows:

Recreation Parks (RP) - areas of significance under the *National Parks and Wildlife Act*, managed for public recreation and enjoyment in a natural setting;

National Parks (NP) - areas proclaimed under the *National Parks and Wildlife Act* considered to be of national significance due to wildlife, natural features of the land or cultural heritage;

Conservation Parks (CP) - areas under the *National Parks and Wildlife Act* that are protected for the purpose of conserving wildlife or the natural or historic features of the land, where the development of visitor facilities tends to be kept to a minimum;

Game Reserves (GR) - areas set aside under the *National Parks and Wildlife Act* for the conservation of wildlife and the management of game at prescribed times for controlled seasonal hunting;

Regional Reserves (RR) - areas proclaimed under the *National Parks and Wildlife Act* for the purpose of conserving wildlife or natural or historical features while allowing responsible use of the area's natural resources (ie. mining);

Conservation Reserves (CR) - land currently set aside for conservation of natural and cultural features under the *Crown Lands Act 1929* and held under the care, control and management of the Minister for Environment, that for various reasons were not proclaimed under the *National Parks and Wildlife Act, 1972*;

Wilderness Protection Areas (WPA) - land set aside under the *Wilderness Protection Act 1992* to protect natural and remote areas.

2.2 Government Policy and Legislation

When managing reserves, DEH is required under section 37 of the *National Parks and Wildlife Act* to have regard to, and provide actions that are consistent with the following objectives stated in the Act:

- preservation and management of wildlife;
- preservation of historic sites, objects and structures of historic or scientific interest within reserves;
- preservation of features of geological, natural or scenic interest;
- destruction of dangerous weeds and the eradication or control of noxious weeds and exotic plants;
- control of vermin and exotic animals;
- control and eradication of disease of animals and vegetation;
- prevention and suppression of bush fires and other hazards;
- encouragement of public use and enjoyment of reserves and education in, and a proper understanding and recognition of, their purpose and significance; and
- generally, the promotion of the public interest.

Additional legislation, conventions and agreements, DEH is obliged to comply with are listed in Appendix A.

2.3 Native Title

Native Title is used to describe the interests Aboriginal and Torres Strait Islander People have in land and waters according to their traditional laws and customs. Federal legislation, in the form of the *Native Title Act 1993*, was enacted to:

- provide for the recognition and protection of native title;
- establish ways in which future dealings affecting native title may proceed and to set standards for those dealings;
- establish a mechanism for determining claims to native title; and
- provide for, or permit, the validation of past acts, and intermediate period acts, invalidated because of the existence of native title.

Any development proposed for a reserve must be valid in terms of the *Native Title Act 1993*.

This management plan is released and will be adopted subject to any native title rights and interests that may continue in relation to the land and/or waters. Nothing in the management plan is intended to affect native title. Before undertaking any future acts that might affect native title, DEH will follow the relevant provisions of the *Native Title Act 1993*.

However, in addition to the requirements of native title legislation, DEH is committed to developing partnerships with Aboriginal people. This may include a number of native title and Aboriginal heritage groups.

Consistent with South Australian Government policy, DEH is also keen to pursue Indigenous Land Use Agreements (ILUAs) where appropriate. ILUAs are voluntary agreements between a native title group and other people about the use and management of land and/or waters.

2.4 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) represents a fundamental reform of former Commonwealth environment laws. The Act establishes a new Commonwealth approval process for assessment of proposed actions that are likely to have a significant impact on matters of national environmental significance and provides an integrated system for biodiversity conservation and management of important protected areas.

Matters that require assessment and approval of proposed actions under the EPBC Act 1999 are:

- any action that has, will have or is likely to have a significant impact on the following identified matters of national environmental significance:
 - World heritage properties
 - Ramsar wetlands of international significance
 - Nationally listed threatened species and ecological communities
 - Listed migratory species
 - Commonwealth marine areas
 - Nuclear actions (including uranium mining)
- any activity involving Commonwealth land that has, will have, or is likely to have a significant impact on the environment.

With regard to Innes National Park there are several nationally threatened species that occur within the park, they are the Winter Spider-orchid (*Caladenia brumalis*), Bead Samphire (*Halosarcia flabelliformis*), Splendid Bush-pea (*Pultenaea villifera* var. *glabrescens*), Annual Candles (*Stackhousia annua*), Malleefowl (*Leipoa ocellata*) and the Southern Right Whale (*Eubaleana australis*). Commonwealth approval is required for any action that has, will have or is likely to have a significant impact on these nationally threatened species in addition to any State approval that may be required.

Furthermore, in consultation with relevant State authorities, the Commonwealth Minister for the Environment and Heritage may develop and implement recovery plans and threat abatement plans for threatened species and ecological communities listed under the EPBC Act. Where applicable, DEH should contribute to and incorporate these plans into park management regimes and operational procedures.

3 MANAGEMENT CONTEXT

3.1 Purpose of Reserve

National Parks proclaimed under the *National Parks and Wildlife Act* are considered to have ‘national significance’ by reason of the wildlife or natural features of the land.

Innes National Park was proclaimed in 1970 to conserve important habitat for the western whipbird, the mallee fowl and to protect a number of heritage buildings at Innes. Later land additions have been in response to significant recreational use. However, conservation of biodiversity values remains the primary objective of management.

The park is currently managed as an IUCN Category 2 reserve (National Park), which is defined as ‘a protected area managed mainly for ecosystem protection and recreation.’ The objectives of management for such areas are to (IUCN 1994):

- protect natural and scenic area of national and international significance for spiritual, scientific, educational, recreational or tourist purposes;
- perpetuate, in as natural a state as possible, representative examples of physiographic regions, biotic communities, genetic resources, and species, to provide ecological stability and diversity;
- manage visitor use for inspirational, educational, cultural and recreational purposes at a level which will maintain the area in a natural or near natural state;
- eliminate and thereafter prevent exploitation or occupation inimical to the purpose of designation;
- maintain respect for the ecological, geomorphic, sacred or aesthetic attributes which warranted designation; and
- take into account the needs of Indigenous people, including subsistence resource use, in so far as these will not adversely affect the other objectives of management.

3.2 Location and General Description

Innes National Park is located 300 kilometres by road from Adelaide on the southern extremity of Yorke Peninsula. The park, with an area of 9,232 ha, was first dedicated in 1970, with additions in 1977, 1984 and 1993. Section details and of the park are provided in Appendix B.

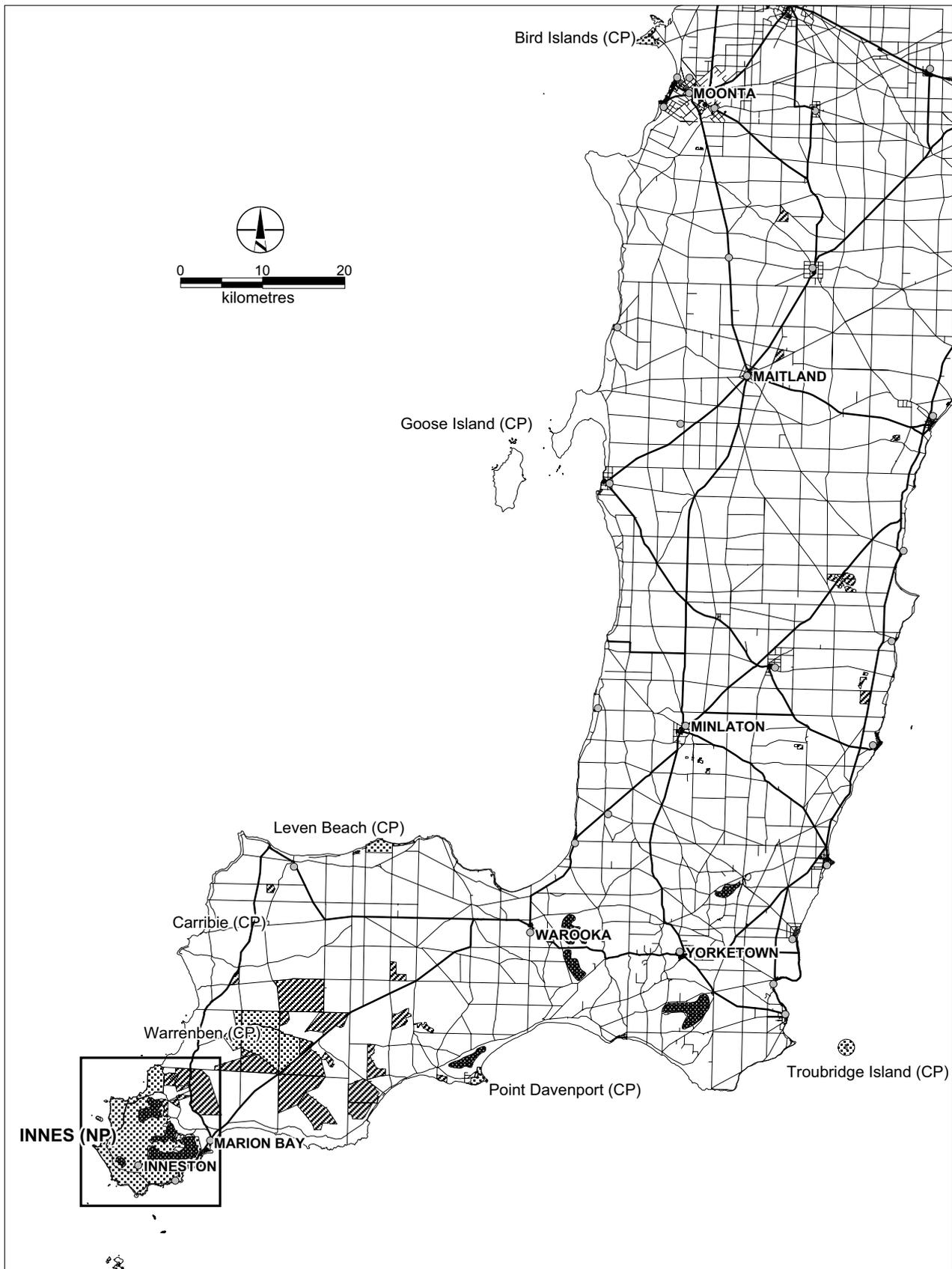
The park comprises the largest area of native vegetation remaining on the Yorke Peninsula and offers outstanding coastal scenery of the southern ocean. Innes National Park features interesting and varied landscapes, including spectacular coastal cliffs, rocky headlands, wave cut platforms and sandy beaches.

The extensive coastal dune system incorporates a range of habitats from open areas of drifting sand to stabilised dunes covered with dense vegetation. Coastal heath dominates the cliff tops and merges further inland with extensive mallee woodlands, salinas and grasslands. These habitats support approximately 333 native plant species, including 115 of conservation significance, 111 species of native birds, 10 species of native mammals and 17 species of native reptiles.

The park provides specialised habitats for species of conservation significance including the Western Whipbird (*Psophodes nigrogularis*) and Malleefowl (*Leipoa ocellata*). The park is also one of only two sites in Australia where Blue-Green Algae stromatolite structures (living fossils) are actively growing within a saline environment.

Innes National Park is a popular tourist destination with recreational opportunities including fishing, surfing, diving, camping, bush walking and enjoying the wildlife and coastal scenery.

The park has extensive Narungga cultural heritage, with many sites of significance to Narungga people. Additionally there are sites of historical significance relating to maritime and mining. The rugged coastline has witnessed approximately 40 shipwrecks, with those within or adjacent to the park, interpreted for park visitors. Gypsum mining also played a major role in the park’s history prior to proclamation. The relics and stories from this important phase in the development of South Australia are interpreted for park visitors at Innes and Stenhouse Bay.

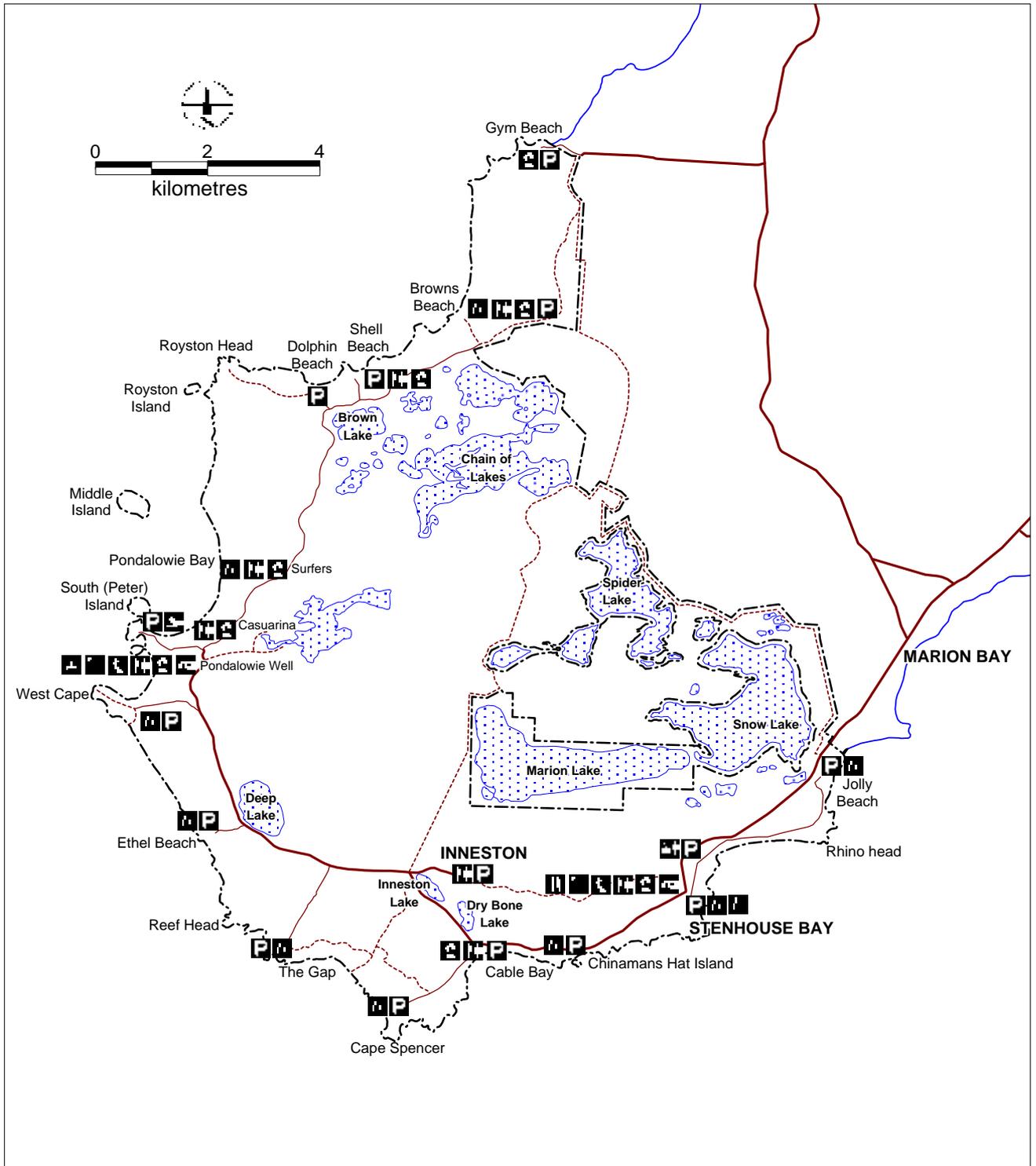


LEGEND

- Main Road
- Road
-  NPWSA Reserve
-  Heritage Agreement
-  Hydrology

Figure 1

Innes National Park
Location



LEGEND

- | | | | |
|--|-------------------|--|---------------|
| | Caravans | | Sealed Road |
| | Parking | | Unsealed Road |
| | Lookout | | Walking Trail |
| | Toilets | | Park Boundary |
| | Bush Camping | | Lake |
| | Telephone | | |
| | Open Air Shower | | |
| | Store/Meals | | |
| | Park Headquarters | | |
| | Jetty | | |
| | Boat Ramp | | |
| | Water Point | | |

Figure 2

Innes National Park

Features

This map is designed and created by Reserve Planning using PAMS.
Date: June 2003

3.2.1 Climate

Innes National Park is exposed to the climate modifying effects of the Southern Ocean. While the park experiences the full force of winter storms, it benefits from cool breezes during summer. Winds are predominantly from the southwest during winter and the southeast during summer.

The average summer temperature is 28°C inland and cooler toward the coast. Winter temperatures are ameliorated by the coastal location and do not usually fall below 10°C.

Maximum rainfall occurs during winter, with July recording the highest average monthly fall of approximately 150mm. Total annual rainfall can vary considerably, but on average, the park receives approximately 500mm each year.

3.3 Regional Setting

Department for Environment and Heritage

Innes National Park is in the Yorke Mid-North Region of the Regional Conservation Directorate of the Department for Environment and Heritage and one of 10 parks in the Yorke District, managed from the DEH Office at Stenhouse Bay. The park has a staff complement of 14, with significant voluntary input from the Friends of Innes National Park and other organisations and individuals.

Other *National Parks and Wildlife Act* reserves in the vicinity include Althorpe Islands Conservation Park, Warrenben Conservation Park, Point Davenport Conservation Park, Carribee Conservation Park, Leven Beach Conservation Park, and Troubridge Island Conservation Park.

National Reserve System and CARRS

Innes National Park forms part of the National Reserve System (NRS), which encompasses all existing protected areas managed and/or administered by State or Commonwealth nature conservation agencies.

The aim of the National Reserve System is to establish a Comprehensive, Adequate and Representative Reserve System (CARRS) for the protection of Australia's biodiversity according to the following principles;

- Comprehensiveness; inclusion of the full range of ecosystems recognised at an appropriate scale within and across each bioregion.
- Adequacy; ability to maintain the ecological viability and integrity of populations, species and communities.
- Representativeness; those areas that are selected for inclusion in reserves reasonably reflect the biotic diversity of the ecosystems from which they derive.

The contribution of Innes National Park to the National Reserves System is important due to the fragmented distribution of protected areas and the poor representation of many environmental associations within Government reserves and protected areas.

Biogeographic Regionalisation and Environmental Associations

The Interim Biogeographic Regionalisation of Australia (IBRA) provides a bioregional planning framework within which to identify the gaps and to set priorities for developing the National Reserve System. IBRA regions represent a landscape based approach to classifying the land surface from a range of continental data on environmental attributes. In 1999, IBRA version 5.1 was developed with 85 bioregions delineated, each reflecting a unifying set of major environmental influences which shape the occurrence of flora and fauna and their interaction with the physical environment.

Innes National Park lies within the Eyre and Yorke Block IBRA region, which is described as 'Archaean basement rocks and Proterozoic sandstones overlain by undulating to occasionally hilly calcarenite and calcrete plains and areas of aeolian quartz sands, with mallee woodlands, shrublands and heaths on calcareous earths, duplex soils and calcareous to shallow sands, now largely cleared for agriculture' (Environment Australia 2000).

The Eyre and Yorke Block IBRA region totals 6,108,971 (ha), 13.46% of which is conserved in protected areas, including 0.15% conserved in Innes National Park.

Within the Eyre and Yorke Block IBRA region, Laut *et al* (1977) recognised a series of Environmental Associations. The Environmental Association (EA) incorporating the park is the Innes EA, described as a 'sandy undulating plain with dunes and salt lakes or low cliffs along the coastline'. Innes National Park conserves approximately 8.91% of the Innes EA, which consists of remnant low mallee woodland and dunes with open heath.

There is a widely recognised benchmark that at least 15% of an original ecosystem should be conserved where possible and even with the contribution of Innes National Park, land representing these ecosystems is inadequately protected and is still considered a priority for conservation and acquisition.

Regional Biodiversity Planning and Heritage Agreements

On-park biodiversity conservation should integrate with broader regional programs. In order to do this DEH has developed the *Biodiversity Plan for the Northern Agricultural Districts of South Australia*. This plan will become a guide for the community and government on the biodiversity assets of the region, major threats and recommendations on priority management strategies for conservation. It provides information on the priority areas, vegetation types and species of the region, and strategic actions to assist in maintaining biodiversity for the future.

The majority of native vegetation on the Yorke Peninsula was cleared for cropping and grazing. On the foot of the York Peninsula there is over 24,921 ha of conserved remnant vegetation in close proximity, including Innes NP, Warrenben CP and several large private properties protected by Heritage Agreements under the *Native Vegetation Act 1991*, that assist with the preservation of biodiversity. These protected areas provide stepping stones or links that can facilitate movement of species, improve overall genetic diversity and boost ecosystem sustainability.

There is a further 27,721 ha of native vegetation adjoining these reserves not formally protected. Elsewhere on the York Peninsula, native vegetation is predominantly on roadsides, coastal strips and in small private remnants (Barritt and Mowling 1975). There are considerable benefits to be gained from an integrated approach to the management of all areas of remnant vegetation, reserved or otherwise, in the region. Natural resource management at Innes National Park should be integrated with Warrenben Conservation Park and the cooperation of surrounding landholders encouraged. Opportunities to provide additional protection for areas of remnant vegetation should be investigated, including local Heritage Agreements or possible land acquisition for the State's reserve system.

Regional Economy and Landuse

Innes National Park is in the District Council of Yorke Peninsula, which extends from Cape Elizabeth to the southern tip of the peninsula, covering an area of 5,834 square kilometres, with a 435 kilometre coastline. The council has a resident population of approximately 11,780 people, who are largely dependent on agriculture and tourism.

The reserve is adjacent to farming and grazing properties. Reserve management, particularly with respect to fire management, weed and pest animal control, should be considered as an integral component of natural resource management projects with neighbouring landholders.

It is important to establish and maintain formal and informal links between park management and other authorities responsible for natural resource management throughout the Yorke Peninsula, including volunteer organisations and local residents. The purpose of these links is to facilitate sharing information as well as implementing effective regional environmental planning and management initiatives.

Innes National Park contributes significantly to the regional economy through direct employment and tourism. Innes National Park is the main tourist destination for approximately 40% of visitors to the Yorke Peninsula, attracting up to 200,000 visitors each year. While annual visitation numbers can fluctuate by 20,000, surveys indicate the park is attractive to local, state and interstate visitors, who enjoy recreational experiences, settings and coastal scenery that are a feature of the region.

3.4 History of Reserve Management

Between the years 1970 and 1999, management of Innes National Park progressed through three identifiable stages. This progression, in many ways, reflects the history of establishment, development and management of other large national parks elsewhere in the South Australian reserve system. The three stages were complemented by a corresponding and progressive increase in both visitor numbers and staff.

1970 to 1979 - Establishment

Prior to proclamation of Innes National Park in 1970, significant numbers of people visited the area for sightseeing and recreational purposes. After proclamation, the initial stages of park development included the designation of park boundaries, the establishment of a permanent on-site staff presence and initial attempts to introduce a management regime for visitors. In 1977 the first draft management plan was prepared and released for public review.

The major achievements during this period included:

- construction of a ranger's house and office at Deep Lake;
- development of a formal campground at Browns Beach;
- upgrading of the track to Browns Beach to all weather standard;
- closing of several duplicated tracks to reduce damage to the coastal areas of the park;
- preparation of a draft management plan; and
- recognition and partial acceptance by visitors and the local community, that Innes was now operating under the provisions of the *National Parks and Wildlife Act*.

1980 to 1990 - Infrastructure Implementation and Resource Protection

The second stage included the adoption and implementation of a park management plan, the establishment of the Yorke Consultative Committee and the Friends of Innes National Park group, who provided much needed community support.

Substantial projects undertaken included weed management and the development of basic visitor facilities, information and interpretive services for recreation and the protection of fragile coastal environment.

Visitor numbers continued to increase and park managers initiated commercial agreements and implemented a user pays principle, including a self-registration system for visitors. Implementation of management objectives required a concerted effort by staff to gain understanding and acceptance from the local community and park visitors.

Major achievements during this period included:

- selection of Stenhouse Bay as the preferred location for staff residences, park headquarters and workshop facilities;
- development of visitor infrastructure at Chinamans Hat Bay, Pondalowie, Casuarina, Shell Beach, Cable Bay and Cape Spencer;
- upgrading of various wells and tanks for water supply throughout the park;
- upgrading of the Stenhouse Bay Jetty;
- establishment of park protection programs, including fauna monitoring and major weed control projects;
- management of Inneston as an historic site; and
- establishment of seasonal interpretation and activity programs for park visitors.

1990 to 2001 - Consolidation

During the most recent decade, upgrading visitor facilities has continued, along with consolidation of the self-registration system and the development of the new 'Park Headquarters', officially opened on Sunday, 16 April 2000. Increased visitor numbers has also focused attention on visitor safety and public risk issues, resulting in a review of management objectives and the installation of improved infrastructure at some sites.

Community recognition of park values and awareness of the importance of the park to the regional tourism economy has grown. The regional community continues to have an ongoing involvement in shaping management direction, through the Yorke Consultative Committee and the Friends of Innes National Park group.

Major achievements have included:

- construction of a boardwalk and viewing platform at Surfers;
- redevelopment of Pondalowie Bay campground;
- upgrading of accommodation cottages for visitors;
- new bitumen road built to Pondalowie Bay; and
- a number infrastructure developments undertaken to help minimise public risk.
- a new park entrance 'Park Headquarters', incorporating new entry road and carparks, new administration, ticket and information facility, self registration and fee collection station and public toilets.

3.5 Existing Management Arrangements

DEH is obliged to comply with government policy and agency directives, including those relating to the tenure of shacks located on the park, and to meet contractual obligations under various leasing and licensing arrangements.

In terms of providing visitor accommodation and services, there is an informal 'partnership' arrangement between DEH and the lessees of Rhinos Tavern and general store at Stenhouse Bay (see 4.7.2 Stenhouse Bay General Store, Tavern and Hall). Short-term rental accommodation is available at Inneston and private individuals hold various buildings, including shacks, on long-term lease for accommodation purposes.

There are a number of sites and items of infrastructure relating to telecommunications, nav aids and power supply, located in the park. Operators of these require ongoing rights of access and maintenance.

3.6 Management Philosophy and Strategic Directions

The role of reserves is predicated by the twin aims of the *National Parks and Wildlife Act*: to provide for public benefit and enjoyment and to conserve wildlife in a natural environment. Increasingly, the importance of biodiversity conservation is being recognised and the future use and management of reserves must address this issue. Proposed actions will need to be assessed for their ability to meet the primary objective of biodiversity conservation, which may result in public use becoming regulated to serve that aim.

The long-term vision for Innes National Park is to conserve, enhance and protect biodiversity and cultural values, while providing ecologically sustainable recreation activities for the local and broader community. To achieve this vision, DEH will pursue the following strategies:

- Protect and conserve biodiversity by undertaking targeted monitoring, mapping and active management of natural resources and processes that threaten park values; assess progress in achieving objectives against appropriate performance measures.

- Conserve biodiversity and land system environmental stability, by providing for public use and enjoyment of the park at locations that are, as far as is possible, sustainably managed to limit impacts on park values.
- Conserve Indigenous and Non-Indigenous sites of cultural value in a manner that is consistent with legislation, community expectations and recognised best practice.
- Provide visitors with recreational settings, opportunities, facilities and information to enhance their experience and facilitate appreciation and understanding of management regimes being implemented.
- Adopt an improved approach to facility development, through producing and implementing a delegate visitor facilities and services plan that will outline strategies to establish and maintain a range of recreational settings and opportunities. These will include 'wilderness'/natural settings and improved, structured recreational sites and opportunities. The plan will also incorporate strategies to anticipate and reduce the potential for conflict between user groups.
- Maintain the Stenhouse Bay precinct as the gateway to Innes, with a modern, functional, aesthetic entrance, and appropriately located and designed infrastructure.

4 MANAGEMENT PRESCRIPTION

4.1 Zoning

Background

Section 39 of the *National Parks and Wildlife Act* provides for the designation of zones in a reserve and constrains the use of land in those zones to the conditions specified in an adopted management plan. Zoning aims to ensure that public use and management actions remain compatible with the protection of park values. Innes National Park needs to be zoned to ensure the provision of a range of high quality visitor amenities and recreation experiences while safeguarding biodiversity values.

The management zones described below and shown in Figure 3, establish a framework for the sustainable use of the reserve during the life of this plan.

Objective

Zone Innes National Park to ensure:

- conservation of biological and cultural values;
- landscape and land system protection; and
- appropriate public use in a diversity of recreation settings.

Strategies

Designate and apply the zones shown in Figure 3, defined as follows:

Coastal Conservation Zone

This zone includes the coastal areas of the park. It includes areas of high conservation value, quality landscape appeal and the majority of recreational opportunities. This zone requires careful management of low impact visitor facilities. Development works within this zone will be confined to:

- improvements to existing roads and tracks, plus associated signs;
- approved walking trails and associated signs;
- conservation works, public safety constructions and associated signs;
- major facility nodes; and
- minor facility nodes.

Development Zone

Major Facility Nodes

Within the Coastal Conservation Zone, seven previously developed sites are recognised as major facility nodes. At these sites, it is accepted that the provision of built facilities and services impact on the immediate environment. However, every effort will be made to minimise this disturbance, and will be monitored and managed to ensure that existing biodiversity values are not further compromised.

Major facility nodes are located at:

- Stenhouse Bay
- Pondalowie
- West Cape
- Inneston
- Gym Beach

Minor Facility Nodes

Minor facility nodes are intended to provide modest facilities for small numbers of people. They include day visit areas, camping sites, or both. An emphasis on private, more natural camping areas for visitors who wish to camp alone will also be provided where possible. Minor facility nodes recognised within the Coastal Conservation Zone are located at:

- Cape Spencer
- The Gap
- Ethel Wreck Beach
- Jolly Beach
- Rhino Head
- Chinamans Hat
- Cable Bay
- Dolphin Beach
- Shell Beach

Facility nodes within the Sand Dune Protection Zone are located at:

- Surfers Campground
- Casuarina Campground
- Browns Beach

Mallee Conservation Zone

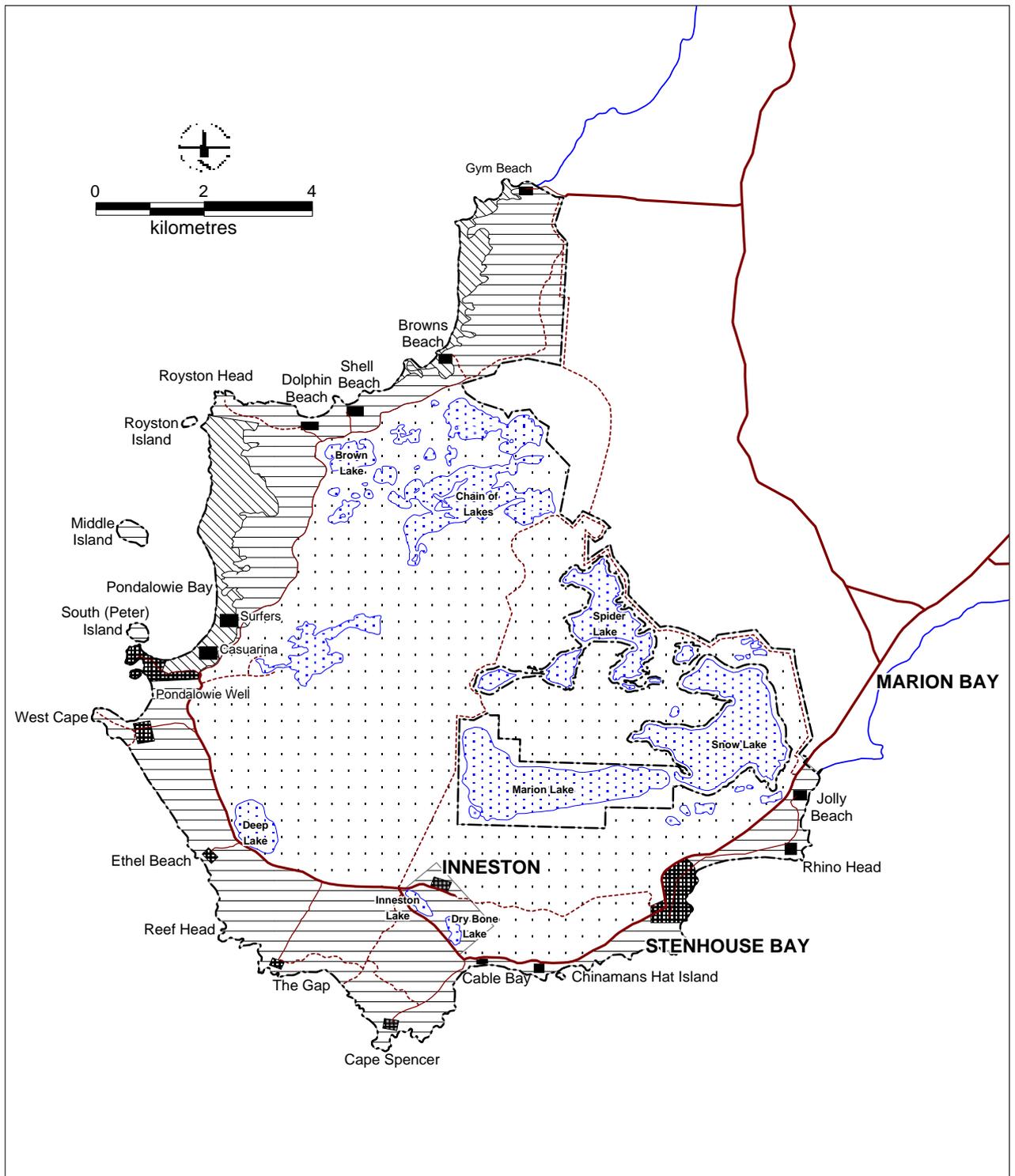
This zone includes the majority of the park. No developments are planned for this zone other than conservation project works, walking trails, fire access tracks and associated signs. The primary intention of this zone is to conserve biodiversity values.

Sand Dune Protection Zone

These zones are located within the dunes north of Pondalow Bay (Casuarina and Surfers Campgrounds) and adjacent to Browns and Gym Beaches. Management actions are proposed that inform visitors of the fragile nature of sand dune vegetation and the damage caused by unrestricted entry and inappropriate use. The effectiveness of educational strategies need to be monitored and if dune erosion continues, zones may need to be formally designated as Prohibited Areas under Section 42 of the *National Parks and Wildlife Act 1972*. In that case, compliance would be enforced and penalties would apply for unauthorised entry.

Actions

- Adopt and implement the zoning plan shown in Figure 3.
- If management actions proposed within this plan fail to prevent dune degradation, seek ministerial approval to formally designate Prohibited Area Zone(s).



LEGEND

	Sealed Road		Mallee Conservation Zone
	Unsealed Road		Coastal Conservation Zone
	Walking Trail		Sand Dune Protection Zone
	Park Boundary		Minor Facility Node
			Major Facility Node
			Lake

Figure 3

Innes National Park

Zoning

This map is designed and created by Reserve Planning using PAMS.
Date: June 2003



4.2 Natural Resources

4.2.1 Geology and Landform

Background

The oldest rocks exposed within Innes National Park are from the Precambrian period, approximately 2,000 million years old. These jointed and foliated granitoid gneisses lie at the base of Rhino Head, Stenhouse Bay Lookout and Cape Spencer. They are the remains of an ancient mountain range worn down to a peneplain through erosion and it is believed the eroded material was deposited into the Adelaide Geosyncline to the east.

Lying unconformably on top of the Precambrian gneisses are the widespread aeolianite limestones produced during the Pleistocene Ice Age, when sea levels were perhaps 120 metres lower than today. Sand and broken shells of calcareous material were blown into huge sheet dunes that later, through the action of percolating water, consolidated into aeolianite limestone. This limestone, which makes up the majority of the sub-surface of the park, is exposed in the cliffs. It often displays calcrete bands associated with weathered surfaces.

The sea inundated a low-lying trough, from Royston Head through to Rhino Head, until about 7,000 years ago. Marine sands and shells were deposited in this trough. As sea levels fell, it is believed that dune systems developed near the coast and stranded a number of lakes inland. These lakes became the evaporation salinas in which calcium carbonate and calcium sulphate crystallised out and produced gypsum deposits. These deposits are found today within the chain of saline lakes that are contained behind coastal dunes in the park. This was also the environment in which stromatolites formed, and in the case of Deep Lake, are still forming.

Today, Innes National Park is located within the Innes Environmental Region (Laut et al 1977) which is described as an undulating plain with dunes, salt lakes and coastal cliffs. The cliffs include wave cut platforms, undermined faces and blowholes.

Three sites; the Inneston Lake, Deep Lake and Marion Lake Geological Sites, were provisionally entered on the Register of State Heritage Items in 1998. This heritage listing has implications for any development works at or near those localities.

At the time the park was proclaimed, the major gypsum lakes were excluded from dedication on the basis that they contained mineral resources that should remain available for mining. More recently, it has been suggested that mining in the lakes is not viable. If the lakes are no longer required for that purpose, their special environments and associated ecosystems could be added to the park, even if mining has to remain an option for the future (see 4.10.1 Additional Land). Regardless, their history as a mineral resource is worthy of interpretation.

Objectives

Protect geological and geomorphological features of the park and interpret them for visitors.

Protect and interpret the gypsum lake environments currently external to park boundaries

Strategies

All steps will be taken to ensure that park management works and visitor activities have minimal impact on geological and geomorphological assets. Information about the geology and mining history of the park will be incorporated into holiday information and activity programs for park visitors and other visitor information. Investigations will be undertaken into the possibility of incorporating the currently excluded gypsum lakes into the park.

Actions

- Include geological and mining information in visitor programs and materials.
- Investigate the possibility of incorporating the excluded gypsum lakes in the park.

4.2.2 Soils

Background

Soils within the park reflect the underlying geology. Shallow calcareous sands overlay aeolianite limestone, while saline sands, clays and loams are associated with salina areas. Four lakes have been mined for gypsum at various times in the past, and were not included in the park proclamation.

Deep calcareous sands occur in association with coastal dunes, which are prone to wind erosion and blowouts if vegetative cover is disturbed. While some blowout activity is natural, the continued occurrence of foot traffic into the foredunes, together with sand boarding, contribute to vegetation destruction and can exacerbate erosion. Areas of mobile dunes have increased with visitor use.

Objectives

Protect soils from adverse impacts and limit erosion to natural weathering.

Strategies

Soil type and condition should be assessed when planning for visitor access or undertaking management activities and development works.

Visitors should be informed of the fragile nature of sand dunes and requested to avoid unnecessary intrusion into these areas (designated Sand Dune Protection Zones in Figure 3).

If necessary, dunes may be declared Prohibited Areas under Section 42 of the *National Parks and Wildlife Act*. Visitors who continue to sand board and access the prohibited areas will be liable for prosecution.

Actions

- Consider the potential for soil erosion when planning visitor access or undertaking management activities and development works.
- Progressively provide a system of walking trails and beach-access paths, the final routes dependent on the preparation and implementation of a walking trail plan.
- Provide interpretive material to inform visitors of the fragile nature of sand dune vegetation and encourage visitors to use the walking trails provided.
- Monitor the impact of foot traffic in dune areas. If an educational approach fails to prevent excessive intrusion into Sand Dune Protection Zones, consider gazetting the zones as Prohibited Areas under section 42 of the *National Parks and Wildlife Act 1972*.

4.2.3 Native Vegetation

Background

Innes National Park has 333 species of native plants recorded and contains a diverse range of vegetation associations, not represented elsewhere on the Yorke Peninsula. They include dunes, coastal heath, mallee woodlands and salinas, providing habitat for over 111 species of native birds and a smaller, but significant, group of native mammals and reptiles.

Historic agricultural activity and in some cases poorly regulated visitor management has modified native vegetation at several sites. Natural regeneration should be encouraged and revegetation programs undertaken to rehabilitate these sites.

A brief description of vegetation associations of the park is provided below:

Dunes

Spinifex (*Spinifex hirsutus*) and Club Rush (*Isolepis nodosus*) dominate vegetation on coastal dunes. On consolidated dunes further inland, a more diverse flora is established, including Coast Daisy-bush (*Olearia axillaris*), Coastal Wattle (*Acacia longifolia* var. *sopharae*), Coast Beard-heath (*Leucopogon parviflorus*), and Sword Rush (*Lepidosperma gladiatum*).

Coastal Heath

Along the coastal cliffs, salt spray, windy conditions and shallow calcareous soils create an environment favouring the establishment of mat plant communities and coastal heath vegetation. The heath includes a wide range of species, mostly below one metre tall, including Coast Beard-heath, Coastal White Mallee (*Eucalyptus diversifolia*), Dune Wattle (*Acacia ligulata*), Coast Velvet-bush (*Lasiopetalum discolor*) and various bush pea species (*Pultenaea* sp).

Mallee Woodland

Coastal White Mallee (*E diversifolia*) dominates the mallee woodland near the coast. Further inland, Kingscote Mallee (*E rugosa*), Red Mallee (*E oleosa*) and Narrow-leaved Red Mallee (*E leptophylla*) become increasingly apparent, with stands of She-oak (*Allocasuarina verticillata*) and Scrub Pine (*Callitris canescens*) throughout. Understorey species includes Dryland Tea-tree (*Melaleuca lanceolata*), Cockies Tongue (*Templetonia retusa*) and other heath plants.

Salinas

There is a pronounced plant succession correlated with decreasing soil salinity and period of inundation. Immediately surrounding the salinas, where salinity is high, saltmarsh communities of samphire (*Salicornia* spp) and bindyi (*Arthrocnemum* spp) occur, with increasing thickets of Paperbark Tea-tree (*Melaleuca halmaturorum*) as salinity declines. Dominant groundcover species in areas of low salinity include Cutting Grass (*Gahnia trifida*), Leafless Ballart (*Exocarpos aphyllus*) and Black-anther Flax lily (*Dianella revoluta*).

The vegetation communities within the park are shown in Figure 4.

Species of Conservation Significance

Innes National Park has 115 plant species of conservation significance (Appendix C), including 24 species recognised at a state level and listed under schedules 7, 8 & 9 of the *National Parks and Wildlife Act 1972*, and 4 species recognised at a national level and listed under the *Environment Protection and Biodiversity Conservation Act 1999*. These species are Annual Candles (*Stackhousia annua*), Winter Spider-orchid (*Caladenia brumalis*), Bead Samphire (*Halosarcia flabelliformis*) and Splendid Bush-pea (*Pultenaea villifera* var. *glabrescens*). Additional species of conservation significance are rated for the Yorke Peninsula herbarium region.

Park management priorities have been mainly directed at providing visitor facilities in designated locations. This approach has confined visitor activity, giving protection to natural values elsewhere. However, it is now clear that a more balanced integrated management effort is required. To ensure the parks natural values are protected, an expanded approach to biodiversity conservation is proposed, which includes targeted monitoring, research and active management including revegetation and weed control.

The main threats to native vegetation are considered to be:

- ongoing pressure on soils and vegetation from visitors and their vehicles;
- coastal dune instability in some locations;
- potential for the rapid spread of aggressively invasive pest plants (eg Bridal Creeper and Boneseed);
- potential for loss of species through catastrophic wildfire events; and
- overgrazing by native and feral animals.

Objectives

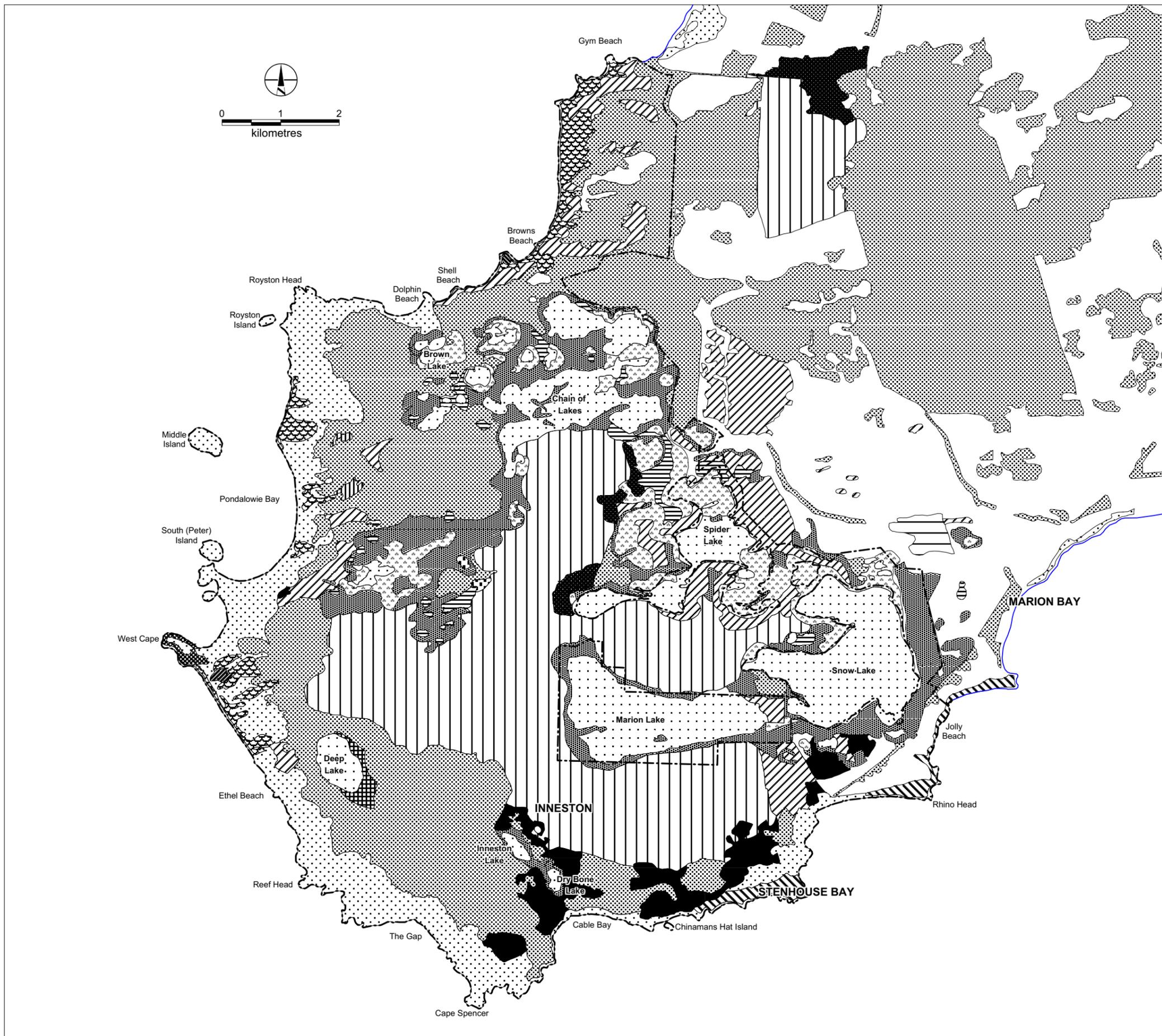
Conserve native vegetation, maximise biodiversity and minimise threats, particularly to plants of conservation significance.

Strategies

Take steps to ensure that visitors do not damage sensitive dune vegetation.

Monitor populations of threatened plant species and develop conservation strategies if necessary.

Where necessary, combine pest plant control programs with revegetation.



LEGEND

- Acacia anceps* Shrubland
- Acacia nematophylla* +/- *Leucopogon parviflorus* Open Shrubland
- Allocasuarina verticillata* Very Low Woodland
- Alyxia buxifolia* +/- *Leucopogon parviflorus* Shrubland
- Callitris canescens* Open Shrubland
- Eucalyptus diversifolia* +/- *E. oleosa* Mallee
- Eucalyptus rugosa* +/- *E. diversifolia* +/- *E. oleosa* Mallee
- Gahnia filum* Sedgeland
- Lakes
- Lasiopetalum discolor* Low Closed Shrubland
- Leucophyta brownii* +/- *Goodenia varia* Low Shrubland
- Leucopogon parviflorus* +/- *Olearia axillaris* Shrubland
- Melaleuca halmaturorum* Very Low Open Forest
- Melaleuca lanceolata* +/- *Allocasuarina verticillata* Low Open Woodland
- Halosarcia* sp. Samphire
- Sand Dunes
- Scaevola crasifolia* +/- *Lasiopetalum discolor* Low Closed Shrubland
- Swamp Unclassified
- Templetonia retusa* +/- *Beyeria lechenaultii* Shrubland
- Modified/Cleared

Figure 4

Innes National Park
Native Vegetation

Actions

- Direct and confine visitor access so that vehicles and walkers do not cause unacceptable impact on sensitive dune vegetation. Initially, this will be done with appropriate and low-key barriers and by interpretive signs that explain the issue for visitors.
- Undertake comprehensive vegetation mapping to determine key associations and wildlife habitats and to provide a strategic basis for threat abatement programs.
- Record on a database the location and distribution of plants of conservation significance, monitor the populations and implement species management programs if necessary.
- Encourage natural regeneration, undertaking revegetation in disturbed sites in association with pest plant control if necessary.

4.2.4 Native Fauna

Background

Mammals

The following native mammal species have been recorded for the park.

Species	Common Name	Conservation Status		
		EPBC Act	NP&W Act	Regional YP
<i>Arctocephalus forsteri</i>	New Zealand Fur-seal			
<i>Cercartetus concinnus</i>	Western Pygmy-possum			
<i>Chalinolobus gouldii</i>	Gould's Wattle Bat			
<i>Chalinolobus morio</i>	Chocolate Wattled Bat			
<i>Delphinus delphis</i>	Common Dolphin			
<i>Eubaleana australis</i>	Southern Right Whale	E	V	V
<i>Macropus fuliginosus</i>	Western Grey Kangaroo			
<i>Neophoca cinerea</i>	Australian Sea-lion		R	R
<i>Tachyglossus aculeatus</i>	Short-beaked Echidna			
<i>Tursiops truncatus</i>	Bottlenose Dolphin			

Note: See Appendix E for Regional and Conservation Status Codes.

Kangaroo populations have been monitored since the early 1970s. From 1978 to 1997, monthly spotlight surveys were conducted, at night, along a 15 km transect. The total number of kangaroos seen within 50m either side of the transect route were identified and recorded to estimate the total population for the park.

Although the 1978-97 survey data are not complete, the average density during this 20 period was approximately 4 kangaroos per km².

A number of trends were also demonstrated:

- The total number of kangaroos counted in the park per annum varied from approximately 150 to 600 animals.
- The variation of monthly counts ranged from 0 to 109 animals.
- Monthly averages, across all years, show a range of between 24 and 57 animals per month.
- Peak months for kangaroo sightings are May-June and October-November, while December to April usually record lower monthly sightings.
- In the years 1978, 1984/1988 and 1992/1993, the total population of kangaroos for the park was estimated at more than 400 animals.
- By comparison, in the year 1995 only 262 animals were recorded (9 month period).

Although inconclusive, results suggest that the kangaroo population in the park is cyclic, staying at comparatively high levels for 4-6 years then declining to half that number for 2-3 years, before returning to higher levels again.

This hypothesis should be tested using a transect of 150km completed over three days. The transect runs through several vegetation associations and will be conducted four times per year to measure seasonal variation. It remains unclear whether the observed changes in population numbers are the result of disease, cyclic drought, population movements or unknown factors.

In comparison to kangaroo population densities elsewhere in Australia for similar vegetation types, numbers appear to be within acceptable limits. However, DEH have observed that sites supporting more palatable vegetation seem to be subject to heavier grazing pressure. Research is required to assess the relative impact of kangaroo grazing on native vegetation and determine if population control is required.

In accordance with section 38 (10a) of the *National Parks and Wildlife Act*, if research and monitoring determine that the existing kangaroo population impact considerably on native vegetation and threaten species of conservation significance, kangaroo population control by culling will be considered. The monthly kangaroo survey results from 1977-1997 are included in Appendix F.

Birds

Birds of Innes National Park include ocean sea birds as occasional visitors and resident coastal species. There are 111 species of native bird recorded for the park, including 13 rated at a state level listed in Schedules 7,8 or 9 of the *National Parks and Wildlife Act, 1972* and 33 species considered significant for the Yorke Peninsula region. The Malleefowl (*Leipoa ocellata*) is recognised as a Vulnerable species at a national level under the *Environment Protection and Biodiversity Conservation Act 1999*.

A list of native bird species that have been recorded for the park can be found in Appendix D.

Biological surveys were conducted and photo points established prior to the preparation of the first management plan in the mid 1970s. Populations of Osprey, Sea Eagle and Western Whipbird have been subject to routine but limited monitoring.

Western Whipbird habitat has remained relatively undisturbed and although they are rarely seen, their calls are often heard. Populations appear to be stable but trends have never been accurately determined. Quantifying the population status of Western Whipbirds has proven difficult due to their elusive nature and the dense vegetation of the park. Recently DEH staff have used recordings of Western Whipbird calls to determine their occupation range within the park. The call response from resident Western Whipbirds has indicated the birds are widespread throughout the park. To accurately determine the population status, ongoing survey work will be required.

Once abundant throughout southern, central and western Australia, Malleefowl populations have been substantially reduced as a result of predation, habitat clearance and fragmentation. In South Australia Malleefowl are sparsely distributed, with populations in the South East, Murray Mallee, Eyre and Yorke Peninsula, and northern arid areas. A breeding population of Malleefowl is conserved in the vicinity of Innes National Park (Benshemesh 2002).

A National Recovery Plan for Malleefowl has been established as required under the *Environment Protection and Biodiversity Conservation Act 1999* (Benshemesh 2002). Priority actions from the plan are :

- secure habitat
- reduce grazing pressure
- reduce fire threat
- reduce predation
- reduce isolation and fragmented populations
- encourage Malleefowl friendly farming
- reduce road deaths of Malleefowl

As part of the National Recovery Plan, a monitoring survey grid was established in South Australia to accurately map the distribution and abundance of Malleefowl mounds. A National standard was put in place to ensure consistency between the states and territory. Surveys are conducted annually and results are being assessed. Ongoing surveys will need to continue with the help of volunteers to determine breeding activity and assess the impact of predation. DEH should continue to contribute to, and incorporate these priority actions into park management regimes to ensure the preservation of viable Malleefowl populations.

Reptiles and Amphibians

The Painted Frog (*Neobatrachus pictus*) is the only amphibian recorded for the park.

The following reptiles have been recorded:

Species	Common Name	Species	Common Name
<i>Christinus marmoratus</i>	Marbled Gecko	<i>Morethia obscura</i>	Mallee Snake-eye
<i>Ctenophorus pictus</i>	Painted Dragon	<i>Nephrurus milii</i>	Barking Gecko
<i>Demansia psammophis</i>	Yellow-faced Whipsnake	<i>Notechis ater</i>	Black Tiger Snake
<i>Diplodactylus vittatus</i>	Eastern Stone Gecko	<i>Pogona barbata</i>	Eastern Bearded Dragon
<i>Egernia multiscutata</i>	Bull Skink	<i>Pseudonaja textilis</i>	Eastern Brown Snake
<i>Hemiergus peronii</i>	Four-toed Earless Skink	<i>Pseudonaja infracula</i>	Peninsula Brown Snake
<i>Lerista dorsalis</i>	Southern Four-toed Slider	<i>Pygopus lepidopus</i>	Common Scaly-foot
<i>Menetia greyii</i>	Dwarf Skink	<i>Tiliqua occipitalis</i>	Western Bluetongue
<i>Morethia adelaidensis</i>	Adelaide Snake-eye	<i>Tiliqua rugosa</i>	Sleepy Lizard
		<i>Tympanocryptis adelaidensis</i>	Prickly Dragon

Objectives

Conserve and manage all native fauna currently inhabiting or using the park by habitat protection and threat abatement.

Strategies

An inventory of animal species and habitats within the park will be recorded, populations monitored and, where necessary, threat abatement undertaken to ensure their conservation.

Actions

- Encourage appropriate volunteer groups and individuals to conduct fauna surveys and population monitoring.
- Record on a database with GIS capability, animal species and habitats, including opportunistic sightings of rare and endangered fauna. Monitor populations of species of conservation significance and, where necessary, develop and implement management plans to ensure their conservation.
- Comply with and contribute to the National Recovery Plan for Malleefowl, as required under the *Environment Protection and Biodiversity Conservation Act 1999*.
- Continue to monitor kangaroo numbers, assess population trends and endeavour to understand their contribution to the total grazing pressure on vegetation in the park.
- Contribute to an integrated regional kangaroo management program, culling if necessary, to maintain a sustainable population that is considered natural for the vegetation types of the park.

4.2.5 Introduced Plants

Background

Innes National Park has 139 introduced plants recorded, many the result of previous agricultural land use or as adjuncts to mining and domestic activities. In the Yorke Peninsula, a number of these are proclaimed under the *Animal and Plant Control Act*, and require control under Section 57(2).

Proclaimed plants include Bridal Creeper (*Myrsiphyllum asparagoides*), African Boxthorn (*Lycium ferocissimum*), Boneseed (*Chrysanthemoides monilifera*), False Caper (*Euphorbia terracina*), Salvation Jane (*Echium plantagineum*), Cut-leaf Mignonette (*Reseda lutea*) and Onion Weed (*Asphodelus fistulosus*).

Control efforts are carried out annually to eradicate Boxthorn and Boneseed, considering the threat they pose to coastal ecosystems. Their management remains as a primary concern.

More recently, Bridal Creeper (*Myrsiphyllum asparagoides*) and Bridal Veil (*Myrsiphyllum* spp.) have established extensive populations throughout mallee woodland areas of the park. If these species are left unchecked, they have the potential to choke out many understorey species and significantly reduce species diversity within the park. Immediate action is required to determine the extent of infestations and to implement control measures to halt bridal creeper and bridal veil from further extending their range.

Objectives

Control and, where feasible, eradicate introduced plants from the park.

Strategies

Fulfil the obligations of the *Animal and Plant Control Act* by locating proclaimed plants in the park and establishing a program for their eradication, continued control and measures to prevent re-establishment.

Monitor the park to detect new infestations of proclaimed plants and, before they become established, eradicate them.

Monitor populations of introduced plants in the park and where practical, implement control or eradication measures.

Contribute to regional programs with the Animal and Plant Control Board and neighbouring landholders to eradicate proclaimed plants and control introduced species.

Actions

- Record the location of introduced plant populations on a database with GIS capability and monitor their spread.
- Undertake control measures and where feasible, eradicate introduced plants, initially directing resources towards protecting areas that are currently least affected.
- Initiate and maintain communication with local government, district Animal and Plant Control Board, and neighbouring landowners, with the aim of integrating pest plant management programs on a regional basis.

4.2.6 Introduced Animals

Background

The following introduced animals have been found in the park:

Species	Common Name
<i>Columba livia</i>	Rock Dove
<i>Felis catus</i>	Cat
<i>Oryctolagus cuniculus</i>	Rabbit
<i>Mus musculus</i>	House Mouse
<i>Passer domesticus</i>	House Sparrow
<i>Rattus rattus</i>	Black Rat
<i>Sturnus vulgaris</i>	Common Starling
<i>Vulpes vulpes</i>	Fox

Control programs have been limited in scope. Rabbit, cat and fox numbers have been noted only opportunistically. Observations of rabbit numbers indicate seasonal fluctuations, although appear to be increasing. Rabbit Haemorrhagic Disease (RHD), formerly known as Rabbit Calicivirus Disease, has had no noticeable impact.

Since 1997 a fox-baiting program has been undertaken on the park boundary twice each year, timed to coincide with lambing and fox-cubbing seasons. In 2000, permanent bait stations were established and are checked monthly. Cat control is undertaken on an opportunistic basis by park staff. No repeatable count of pest animals destroyed has been undertaken.

An integrated pest animal program with cooperation between DEH, local council and neighbouring property owners needs to be developed. Pest animal control programs need to be comprehensive and sustainable over a number of years to achieve measurable results.

Objectives

Control and where possible, eradicate introduced animals from the park.

Strategies

Monitor and manage introduced animal populations and contribute to regional control programs.

Actions

- Undertake effective introduced animal control programs and undertake systematic monitoring of populations.
- Encourage and contribute to regional introduced animal control programs.

4.3 Cultural Heritage

Background

4.3.1 Aboriginal Heritage

Dreaming

For Aboriginal people, land and waters have many interconnected complex meanings and values. The significance of land and waters is central to Aboriginal people's lives: at birth, death, ceremonies and socially, whilst hunting, gathering camping, and travelling. The term "Dreaming" is the term used to describe the combination of these aspects of life, religion, mythology, law and history which includes the past, the present and the future.

The land or waters that an Aboriginal person has a traditional or contemporary association with is commonly referred to as "Country." Both "Country" and "Dreaming" are complex concepts that are difficult for Non-Indigenous people to understand. For example "Dreaming" can be a site located in song, in physical space or embodied in an object. Its physical, social or psychological importance can vary according to the speaker's traditional country, gender, age and personal experience. For these reasons the "Dreaming" is rarely mapped in the western sense but the significance of a site is integral for Aboriginal people.

Furthermore, mythological sites associated with these stories are known only to the Aboriginal people with cultural knowledge of the area. These sites are often landscape features which can be one or many trees, rocky outcrops, riverbeds or water holes. These sites physically represent the ancestors and their activities in the story with the knowledge and "Dreamings" associated with these sites passed down through stories of travellers, ancestors and mythological beings. Many "Dreaming Stories" travel throughout an area and may be known as a "Dreaming Trail" or "Track". Some stories focus on specific "sacred sites". These stories and traditions exclusively belong to Aboriginal people. Who tells them, where they are told, to whom they are told and when, are all a part of their culture and must be respected.

Narungga Culture and Heritage

The Narungga people are the traditional owners of Yorke Peninsula and their boundaries are from north of Port Broughton and east to the Hummock Ranges as far down to Stenhouse Bay inclusive. The land and waters of Yorke Peninsula have a strong connection with the Narungga people.

Dreaming stories and ceremonies were important to Narungga people. Corroborees and meetings were held to settle disagreements to share stories and experiences. The park contains 1 site of significance and other sites related to the Ngarna creation dreaming, after which many features of the park are named. Other stories include Bulgawan, linked to the creation of coastal formations near Pondalowie Bay. Narungga people were and still have a strong physical and spiritual connection to the Yorke Peninsula and in particular Wardang Island.

Before white settlement the Narungga people managed and preserved the coastal and inland environment, which provided important seasonal food resources.

Along with white settlement came diseases, dispersal, the occupation of land and water supplies, which often resulted in violent conflict. The Narungga were progressively dispossessed and their ability to maintain a traditional lifestyle diminished, which led to segregation and the loss of language, traditional stories, ceremonies, significant and sacred sites, hunting and gathering techniques, and many other important cultural and heritage issues. These issues had a huge impact on the Narungga population which dwindled significantly. Some of the language and traditional stories were recorded and are now being re-established.

When copper mining became a focal point for early settlers this also made life more difficult for the Narungga and before soon the Government established Ration Depots around the Peninsula. Point Pearce Mission was established in 1868 by a Morovian Missionary and to the Narungga people this place was known as Bookooyanna. The mission was not only an established facility for Narungga people but was also a place for other Aboriginal groups from other areas. In particular once the Poonindee mission on Eyre Peninsula was closed, people from there were transferred to Point Pearce.

Today the Narungga people have survived and are continuing to live at Point Pearce and other towns around the Peninsula. There is a large number of Narungga descendants living in Adelaide and other parts of the state.

Point Pearce is now a self managed community with a CEO, Administrative staff and a Board of Management. Point Pearce has a number of programs that caters for the needs of the community, such as: CDEP, Aboriginal Community Health Center, Women's Center, Building and Construction Crew, Primary School and TAFE.

The Narungga people continue to practice their culture, language and traditional associations.

The Aboriginal Heritage Act 1988

Under the *Aboriginal Heritage Act 1988*, the South Australian Government is responsible for the protection and preservation of sites, objects and remains of significance to Aboriginal people. The Department for Aboriginal Affairs and Reconciliation maintains a Central Archive of some 6000 site recordings of Aboriginal sites.

The *Aboriginal Heritage Act 1988* defines a site as 'An area of land that is of significance to Aboriginal tradition, Aboriginal archaeology, anthropology or history.'

Site types include:

Archaeological sites, campsites, middens, artefact manufacturing sites. These may occur in isolation or in conjunction with other sites. These may contain scattered pieces of stone leftover from the manufacture of tools, stone or clay hearths, and food remains such as shellfish or animal bone. Middens are characterised by large deposits of shells. They may also contain animal bone, charcoal, stone tools and possibly skeletal remains.

Burial sites. Can be historic or pre Contact. In some areas burials are marked with stones, logs or brushwood at the head or sides of the grave, however most burial sites are only recognisable when they become exposed by erosion or by disturbance. Many are found in sandy areas where they are readily exposed through erosion.

Quarry sites - stone tool, grindstone and ochre quarries. Quarries can be identified from signs of chipping or hammering on suitable rock outcrops and from associated surface scatters of flaked stone.

Stone arrangements- ceremonial, hunting hides, and fish traps. Arrangements can be made out of stone timber or earth. They are distinguished by large or small arrangements of stones laid out in patterns on relatively clear ground, but can also be found across watercourses as fish traps.

Mythological sites. Mythological sites are dreaming sites. These may include natural features in the landscape, such as single trees, rock formations and waterholes to mountain ranges.

Historic sites. Historic sites can include missions; ration depots, birthplaces and fringe camps.

Paintings and engravings. Painting and engraving sites are widely distributed and are found in a range of environments where suitable rock surfaces, shelters and overhangs are found.

Scar trees. Scar trees exhibit scars on the trunk or limbs where bark has been removed for various purposes to make canoes, shields, dishes or shelters. These are also termed Culturally Modified Trees.

Land, developed or undeveloped can contain sites. Sites relate to living patterns and use of environmental resources such as water, animal and vegetable foods and stone by Aboriginal people. They also relate to spiritual beliefs, and ceremonial activities.

Certain landforms at Innes likely to contain evidence of Aboriginal pre-historic occupation include:

- *Claypans, lakes and estuaries* (stone artefact scatters, shell middens, rock art, stone arrangements, campsites or ovens)
- *Rocky outcrops* (quarries, rock art, rock holes, stone arrangements, ceremonial religious sites, stone artefact scatters)
- *Dunes* (stone artefact scatters, shell middens, burials, campsites or ovens)
- *Bush or forested areas* (stone artefact scatters, campsites or ovens)

Currently 21 sites are listed on the Central Archive for Innes National Park. These sites are archaeological sites and burial sites. However, these recordings do not reflect a comprehensive survey of the park. To promote better cultural heritage management at Innes National Park further research needs to be undertaken to identify and record sites of significance on the park.

To ensure the protection of sites, DEH shall consult with DAARE and the Narungga Wodi Heritage Cultural and Language Committee before commencement of any development works.

4.3.2 Colonial Heritage

Colonisation began in 1847 with Mr William Burrage, who occupied land near Cape Spencer to graze sheep. The land became available for lease in 1851 and by 1855, Mr Burrage held two leases in the Cape Spencer area. Grazing was dependant on natural springs, resulting in the establishment of wells at Pondalowie Bay and Browns Beach, which date from this period. The availability of water enabled the establishment of sheep stations at Cape Spencer, Carribie and Stone Hut in the 1860s. It is not known how many people lived in the area in the 1860's, as there was considerable movement to and from areas where work was available.

Minor cropping occurred throughout the 19th century with poor yields due to the intense coastal environment and soil infertility. After 1927, a better understanding of the importance of trace elements (mainly manganese) brought an increase in land clearance and cropping.

The history of land clearance in what is now Innes National Park is not known in detail, but within the park boundaries, land can be found ranging from cleared land and regenerating mallee scrub, to relatively intact native vegetation.

Infrastructure that remains early colonial times include buildings and other relics, including a telephone landline constructed in 1883 from Yorketown to Cape Spencer via Cable Bay. The magnitude of this achievement can be seen when it is considered that the telephone had been invented for only 10 years.

Mining

In 1889, the Australian Gypsum and Whiting Company began mining at Marion Bay, developing the extraction, transport and loading infrastructure for mining gypsum from Marion Lake. This included the first stage of the Marion Bay jetty, a timber rail track (later steel) and eventually the use of two steam locomotives and seventy small side-tipping trucks.

In 1913, the Permasite Company of Melbourne owned by G Bell, A Stenhouse and W Innes established several mining leases and developed gypsum mining at Inneston Lake. They named Stenhouse Bay and built the 200metre long Stenhouse Bay jetty, where fourteen one-ton horse-drawn wagons ran along a wooden tramway from Inneston Lake.

By the early 1900's a community of approximately 150 people were established at Inneston Lake. The settlement had a public hall, butcher, baker, bank and post office, with electricity supplied to numerous stone buildings. In 1916, the plaster factory was built at Inneston from local limestone and in 1927, Inneston was officially proclaimed a town.

Gypsum was blasted from the Inneston lake and was broken up with manual labour. It was then loaded into horse drays and transported to the crushing plant. After reduction into pebble sized fragments, the gypsum was transported to the plaster factory. At the factory, the gypsum was roasted in a rotary kiln to form plaster on site. Timber was sourced locally to supply the kiln.

With the establishment of the plaster factory and increased employment opportunities, the construction of simple limestone cottages to accommodate workers commenced. The poor quality limestone was sourced locally. Lime was burnt on site and the remains of a limestone kiln still exist at Inneston. All manner of salvaged materials were used to construct additions or internal improvements, which are still evident today. Substantial homes with commanding views of the mine site and township were built for the Mine Manager and the Mine Engineer in 1918 and 1921 respectively.

In 1922, a chalk factory was established at Inneston. Both white and coloured chalk were eventually produced under the Bellco brand to commemorate GT Bell, one of the founders of the Permasite Company.

During the late 1920s and 1930s, the Marion Bay and Inneston gypsum mining operations were consolidated and owned by Waratah Gypsum Pty Ltd. The township was flourishing by this stage, with a tennis court, cricket and other recreational facilities.

Between 1905 and 1973, 6 million tons of gypsum were mined from Marion, Inneston and Spider Lakes. Until recently, commercial gypsum mining continued on several lakes excluded from the park.

Today, the park features extensive remnants of mining history, including historic sites at Inneston and Stenhouse Bay. Inneston is entered on the State Heritage Register under the provisions of the *Heritage Act 1993*. Part sections 101,125 and 131 were identified as the "Inneston Gypsum Complex" and entered on the Register in 1986. Heritage items from the park's mining history are also registered, including the Stenhouse Bay Jetty, provisionally entered in 1988. The *Development Act 1993* restricts development in State Heritage Places and professional advice from the Heritage branch of DEH is required.

Maritime History

The exposed coast of the southern Yorke Peninsula and the unpredictable storms of the Southern Ocean provided serious navigational hazards for ships trying to negotiate the narrow Investigator Strait. Over time, lighthouses were installed at Althorpe Island, Cape Spencer and West Cape for guidance, but a number of vessels came to grief, with approximately 40 shipwrecks off the coast. Those adjacent to Innes National Park include the Ethel, Willyama, Ferret and Hougomont. The full and colourful histories and demise of these ships is contained in interpretive material available at Innes National Park.

The Ethel was a 711 ton sailing ship that came aground on a sandy beach south of West Cape during a storm in 1904. Although a crew member was drowned, the vessel remained largely undamaged. Months later it was bought at auction and an attempt was made to salvage it. However as the Ethel was winched into deep water, another storm blew up and the ship was beached again, this time with a broken back.

The steamer Willyama ran aground in 1907 east of Rhino Head near Marion Bay, while the Ferret, a 445 ton steamer, ran aground on a reef near Ethel Beach in 1920.

In the 1920s, the Permasite Company purchased the Hougomont, a four-masted sailing ship, and deliberately sunk it at Stenhouse Bay as a breakwater for the jetty.

Objectives

Conserve and protect significant cultural heritage sites and provide appropriate interpretive material.

Strategies

Meet legal requirements under the *Aboriginal Heritage Act 1988*, the *Heritage Act 1993* and the *Development Act 1993*.

The advice of the Narungga community and other relevant authorities should be sought prior to undertaking any developments or restoration work at sites of cultural or historic significance.

Accumulate and maintain historic records for the park.

Actions

- Consult Narungga people who have a traditional association with the land, Native Title Claimants and relevant State and Federal Aboriginal heritage authorities, in decisions regarding the management of Narungga cultural heritage.
- Before proceeding with any development works within the reserve, obtain an assessment and clearance from the appropriate authority, under the provisions of the *Aboriginal Heritage Act 1988*.
- Identify, record, protect, restore and monitor known or relocated sites and items of archaeological, anthropological, cultural and historical significance located in the park, in cooperation with the Department for Aboriginal Affairs and Reconciliation, the Heritage branch of DEH and other relevant authorities and organisations. Narungga and historic cultural heritage sites require conservation plans to facilitate appropriate management.
- In consultation with the Narungga community, the Heritage branch of DEH and other relevant authorities, research and inventory, cultural and historic sites and stories that relate to the park and where appropriate, develop interpretive material and tourism programs for visitors. Interpretive material may include web-site, brochures, site signage and displays.
- Consult Narungga people who have a traditional association with the land comprising the park to determine the appropriateness of naming park features using both Narungga and existing names.
- Seek funding to employ an historian to gather the available oral history of the park.
- Encourage and support archaeological, anthropological and historic studies within the park. All sites located during these surveys should be recorded to the standards set by the Heritage branch of DEH and/or DAARE and submitted for inclusion on the DAARE Central Archive and/or State Heritage Register.
- Establish, with professional guidance, a priority action list for site conservation at Inneston and Stenhouse Bay to conserve and manage heritage buildings and objects in accordance with the Burra Charter (Australia ICOMOS 1981).
- Commission a conservation plan for the heritage of the park as a sub-section of a visitor infrastructure and services plan.

4.4 Fire Management

Background

Bushfires

The management of bushfires is primarily aimed at preserving life and property. Fire suppression and prevention strategies should be addressed in a bushfire prevention plan for the park.

No significant bushfires have occurred in the park since it was proclaimed in 1970. A number of small fires have occurred, usually resulting from poorly managed campfires. Mallee vegetation can be subject to extensive wildfires and, although the recorded incidence of fire within the park is low, there is the potential for an intense bushfire.

Given that Innes National Park conserves the majority of biodiversity on Yorke Peninsula, it is particularly important that large areas are not burnt at any one time. Consequently to avoid critical loss of habitat, bushfires should be suppressed as quickly as possible.

Existing roads and tracks are thought to be adequate to provide practical boundaries within which to contain bushfires.

Campfires and Firewood

Campfires are prohibited within Innes National Park during the fire danger season, generally from 1 November to 30 April. At other times, solid fuel (wood) fires are permitted in designated campfire sites only. While it is acknowledged that campfires form an important part of the camping experience, DEH is concerned that firewood collection in areas immediately surrounding campsites and along tracks damages wildlife habitat.

Despite the provision of firewood for sale, visitors continue to utilise local fuel. Habitat damage will be monitored and, while DEH will continue to provide and encourage the use of alternative fuel, the total ban of wood fires may be necessary.

Objectives

Protect lives and property and limit the spread of bushfire within the park.

Strategies

Develop and implement a bushfire prevention plan in association with local CFS officers and in conjunction with regional initiatives.

Utilise best practice land management and fire suppression techniques to ensure minimal damage to the natural and cultural values of the park during any fire suppression activities.

Ensure that campfires do not have a deleterious impact on campsites or park values.

Actions

- Comply with provisions of the *Country Fires Act 1989*.
- Develop and regularly update a bushfire prevention plan for the park, in association with local CFS officers and neighbouring landowners.
- Establish and regularly review a park visitor protection and evacuation plan to be implemented in the event of a serious bushfire.
- Maintain existing fire access tracks and only create new tracks if there is no alternative means to prevent the loss of life or property.
- Maintain water points, windmills, tanks and other water sources necessary for bushfire suppression.
- Ensure visitors comply with fire restrictions during the fire danger season.
- Provide well defined campfire sites within camping areas.

- Prohibit the collection of local firewood and provide interpretive material to explain its importance to wildlife.
- Encourage visitors to supply their own fuel and continue to make alternative fuel available for sale.
- Monitor the impact of campfires and in the event that damage to biodiversity, habitat or visual amenity becomes significant, implement a more sustainable regime.

4.5 Infrastructure and Built Assets

Background

Development Works

Development works undertaken by DEH, that are adequately described in a formally adopted *National Parks and Wildlife Act 1972* management plan, satisfy the development approval requirements of the *Development Act 1993*. However, such approvals under Schedule 14 of that Act do not apply if the development site is listed on the State Heritage Register, or if the development is being undertaken by the private sector or in partnership. In such cases, normal approval processes of the Development Assessment Commission apply.

Natural Hazards and Public Risk

Innes National Park, with its extensive coastal cliffs and high energy ocean environment, includes numerous sites where extensive natural hazards occur. Cliff slumping, freak waves, sharks and snakes are just some of the potential hazards. DEH has a duty of care to visitors and is required to take all reasonable steps to minimise public risk in locations where visitors are encouraged to visit.

Visitors should take their own safety precautions if they choose to visit un-promoted locations for which DEH does not provide facilities or information. These areas are often inherently hazardous and are rarely monitored by park staff.

Objectives

Comply with the appropriate procedures for undertaking development works and ensure that DEH exercises a reasonable duty of care for park visitors.

Strategies

DEH will consult with the relevant authorities and fulfil the appropriate legal requirements when undertaking development works on the park.

In relation to risk management, DEH will endeavour to provide safe walking paths, viewing platforms and clear signs indicating hazard or risk in all actively managed areas of the park.

This management plan also provides appropriate prospective authority to undertake unspecified public works that are essential to meet contemporary standards of public safety, subject to ministerial approval and provided they are consistent with the management intent and there are no viable alternatives.

The Commonwealth, or organisations operating under the authority of Commonwealth legislation (eg telecommunications carriers), may undertake actions within Innes National Park, subject to ministerial approval, even though they may not be referred to in specific terms in this management plan, provided that such actions are not inconsistent with the objectives of this plan and are demonstrably in the public interest.

Actions

- Comply with provisions of the *Development Act 1993*.
- Maintain a Risk Register for Innes National Park.

4.6 Recreation and Tourism

4.6.1 Visitor Use

Background

Innes National Park provides an exceptional range of recreational settings for day visitors and campers, including several heritage-listed cottages for hire. The park contains excellent ocean beaches, scenic views, walking trails and nature study opportunities, and is popular for sailing, diving, surfing and fishing.

Innes National Park receives a high annual visitation, contributing significantly to the regional economy. Up to 200,000 people visit the park each year (NPWSA 2002), with the most popular times during the Easter and October long weekends, and the Christmas holiday period. The majority of park visitors come from Adelaide, with a small but consistent number from interstate and overseas.

During long weekends, approximately one-third of all visitors camp within the park, while two-thirds are day visitors. The number of visitors on long weekends during 1997 varied from 1,700 in June to 3,500 at Easter, while the October long weekend saw 2,500 visitors.

A DEH visitor survey conducted during December 1997 and January 1998 indicated that the most popular aspects of the park were its beaches, coastal landscape and the Inneston precinct. Other popular aspects included surfing and fishing opportunities, wildlife and the tranquillity of the natural environment. The surveyed visitors also requested more toilets, rubbish bins, BBQs, shelters and cabin accommodation.

Objective

Ascertain visitor requirements to guide the provision of visitor services.

Strategies

Visitor requirements will be ascertained through surveys. Facilities that enhance, or at least do not detract from, the park's natural and cultural values will be provided where feasible and practical.

Actions

- Continue to undertake surveys to ascertain visitor requirements.
- Develop programs to address visitor needs that provide education and enjoyment without compromising the conservation of park values.

4.6.2 Vehicle Access

Background

With up to 200,000 people visiting the park each year and up to 3,500 people visiting on any one day during peak holiday periods, Innes National Park must cater for a diverse range of vehicles, with all public tracks maintained to be traversable by conventional vehicles.

A new bitumen road links major day visit sites and extends from the park entrance to Pondalowie Bay. While ameliorating some impacts, the new bitumen road increases pressure on existing campsites at Pondalowie, Casuarina and Surfers campgrounds. The road provides easier access for tourist buses, which traditionally did not attempt to drive the old dirt road from Stenhouse Bay. This increased use requires the review and upgrade of side roads, carparks and corner alignments to permit safe entry and departure by buses and other large vehicles, including towed vehicles such as caravans.

In order to protect the resource, limits of acceptable change and the maximum number of visitors/vehicles permitted in the park need to be established and maintained below that level.

This plan will provide for:

- 200 vehicle-based camping groups, or approximately 700 persons over-night maximum.
- 300 day-visit vehicles and 10 buses, or approximately 1,500 day-visitors maximum.

This provides for a maximum number of approximately 2,200 persons in the park at any one time on any given day. This number is unlikely to be reached under present circumstances, but defines a set limit for the future.

Objective

Provide appropriate access for park visitors and for management and emergency purposes.

Strategies

The key elements of the proposed access network are to provide the following:

An appropriate, functional entrance to the park that provides a sense of arrival, facilitates convenient payment of a park entrance fee, and provides orientation for and the dissemination of information to visitors.

The provision of safe, comfortable 2WD primary roads within the park for visitors wishing to access the more significant accommodation, camping or picnic sites, suitable for cars towing caravans and boats, buses and other vehicles.

Secondary roads and carparks which are able to accommodate buses and cars with trailers.

Tertiary roads and tracks (suitable for 2WD vehicles) that provide limited access to more remote and natural destinations within the park. However, these locations and the roads that service them should not be designed for buses and caravans.

Fire access tracks for emergency vehicles and management purposes. Secondary and tertiary public roads also serve as potential control lines for fire management purposes.

A range of walking trails and tracks linking locations of interest within the park.

Minimise danger by prohibiting horses and horse-drawn vehicles on narrow roads within the park (see 4.6.4 Horse Access).

Actions

- Maintain 2WD bitumen-sealed access road from the park entrance to Pondalowie Bay and upgrade carparks within the park.
- Progressively improve access and landscape vistas by bitumen-sealing the secondary roads to Cape Spencer, the Gap and West Cape.
- Continue to maintain the tertiary road and carparks from Pondalowie Bay to Browns Beach. Consideration will be given to upgrading this road to minimise public risk issues, environmental impact and maintenance costs.
- Maintain a system of fire and management access tracks.
- Encourage visitors to use designated walking trails, particularly through the dune areas.
- Monitor foot traffic in the dune areas and if current measures fail to confine walkers to designated routes, contemplate the possibility of formally gazetted a Prohibited Area (see 4.1 Zoning) under the provisions of section 42 of the *National Parks and Wildlife Act*. Visitors who continue to sand board and walk in the dunes, causing increased erosion and vegetation loss, would then be liable for prosecution as part of a compliance strategy.
- Progressively provide a system of walking trails and beach-access paths within the park, with final routes to be chosen following detailed planning.

4.6.3 Boat Access

Background

Several people, including commercial fishers, access the park by boat. Recreational visitors are required to obtain either a camping or day access permit.

Although there is no constructed boat ramp at Pondalowie Bay, boats may be launched from the beach. This activity is expected to increase now that the road to Pondalowie Bay is sealed. It is important that boat owners and other park visitors continue to enjoy the area simultaneously.

Objectives

Ensure that vehicle access and boat launching does not compromise natural values or impinge on visitor enjoyment.

Strategies

Monitor the use of Pondalowie Bay by visitors with boats and regulate boat use, as necessary, to maintain park values and visitor experience. This may involve parking arrangements for trailers, boats and towing vehicles.

Actions

- Monitor boat use at Pondalowie Bay and implement measures considered necessary to maintain biodiversity values and visitor experiences.

4.6.4 Horse access

Background

The use of Innes National Park for recreational horse riding has not been widespread. There appears to be limited demand for horse riding in the park and no infrastructure has been established for this activity to be pursued in safety.

With the recent sealing of the road from Stenhouse Bay to Pondalowie Bay, vehicle speeds have generally increased. This is monitored regularly by South Australian Police. However, with the small road verges, the narrow, winding nature of the road and vehicle speeds, there are considerable risk issues associated with horse riding on this road.

There are no dedicated trails for horse riding within Innes National Park, with only two linear walking trails in the park, which traverse areas of high biodiversity value. Significant impacts may occur should horse riding be permitted on these trails. Given the generally sandy soils within the park, there is considerable potential for soil degradation and weed species currently absent from Innes NP to become well established. The safety of walkers using the trails may also be compromised.

Beaches within the park may only be accessed along internal park roads or walking trails, none of which are suitable for horse riding because of the aforementioned safety and environmental issues.

For these reasons, horse riding will be prohibited in Innes National Park.

However, DEH will continue to monitor demand for recreational horse riding and liaise with the Yorke Peninsula Marketing Committee regarding horse riding opportunities in areas of southern Yorke Peninsula that do not have significant biodiversity values.

4.6.5 Walking Trails

Background

Innes National Park provides excellent locations for a variety of bush walking experiences and has an established system of walking trails and beach access paths for visitor use. New trails will be developed for visitor enjoyment and to discourage visitors from walking on dunes and erosion-prone areas.

Objectives

Progressively design, develop and maintain a limited number of formal walking trails.

Strategies

Future walking trails will be sited and developed to protect native vegetation and other park values, while providing access to scenic locations and areas of interpretive interest. Detailed planning will be conducted prior to implementation, and may include the following conceptual routes:

- a coastal walking trail;
- a half-day circular walk from Dolphin Beach to Royston Head, including a section adjacent to the cliffs;
- a one day circular walk from Stenhouse Bay to Cable Bay and then to Inneston returning to Stenhouse Bay via the 'plaster trail' (the Thomson Pfitzner Trail); and
- a half day walk from Pondalowie Campground to Pondalowie Surf Break and through the dunes on the boardwalk to Surfers. From Surfers east to the salt lake and then return to Pondalowie.

Actions

- Develop and implement a delegate plan for walking trails that safeguards environmental values and provides quality visitor experiences.

4.6.6 Visitor Facilities

Background

Park Entrance and Headquarters

The original park entrance went through the old Stenhouse Bay township, formerly an industrial mining town and shipping port. The new 'Park Headquarters' closer to the park entrance was developed to cater for the needs of newly arrived visitors. Created with purpose-built infrastructure, it contributes to a sense of arrival and entry into Innes National Park and provides necessary information for visitors.

Although changes and improvements have been made over the decades, the sense of arrival at the park still remains somewhat confusing for visitors, especially if they do not call at the visitor centre.

Operated under a lease agreement, Rhinos Tavern and General Store at Stenhouse Bay provide essential services for visitors and DEH staff. The general store provides basic grocery items, take away food, bait, petrol, diesel and post office facilities. Rhinos Tavern provides meals and beverages.

Accommodation

There are several heritage listed cottages available to visitors for overnight accommodation:

- The Engineers Lodge, located at Inneston, is a self contained cottage suitable for 10 persons. Facilities include 3 bedrooms, kitchen with gas stove and fridge, lounge, shower and solar powered lights.
- The Managers Lodge, located at Inneston, is a self contained cottage suitable for 10 persons. Facilities include 3 bedrooms, kitchen with gas stove and fridge, lounge, shower and solar powered lights.
- The Miners Lodge, located at Inneston, is a self-contained cottage suitable for 8 persons. Facilities include 3 bedrooms, kitchen with stove and fridge, lounge, shower and electricity.
- Norfolk lodge, located at Inneston, is a self contained cottage of bed and breakfast standard suitable for 4 persons. Facilities include 2 bedrooms, kitchen with gas stove, fridge, lounge, shower and electricity.
- Gatehouse Lodge, located at Inneston, is a self contained cottage suitable for 6 persons. Facilities include 2 bedrooms, kitchen with stove and fridge, lounge, shower and electricity.
- Shepherds Hut, located at Shell Beach, is a very basic but popular cottage suitable for 4 persons. Facilities include 2 bunk beds but no power supply.
- The Stenhouse Bay Hall, accommodates up to 36 persons. Facilities include kitchen, modern toilet and shower facilities, ample storage space and power. The hall is managed under lease and bookings may currently be made at Rhinos Tavern.

Camping and Day Visit Areas

Campsites have been developed at several popular locations, which are used by the majority of visitors. These are located at Jolly Beach, Stenhouse Bay, Cable Bay, Pondalowie Bay, Casuarina, Surfers, Shell Beach. Browns Beach and Gym Beach.

Some of these campgrounds need to be rationalized to minimise impacts on sensitive environments, while others may be developed appropriately to accommodate high, seasonal visitor demand. There is also a demand for more nature based camping opportunities for visitors who wish to be secluded from other visitors.

Day visit areas have been established at sites of cultural and natural interest. These include popular beaches, shipwrecks, mining relics and the historic Inneston township. Facilities include car parking, interpretive signs, and at some sites, coin operated barbecues (Pondalowie Bay and Stenhouse Bay) and toilets (Pondalowie Bay, Stenhouse Bay, Cable Bay and Browns Beach).

Objective

Provide appropriate experiences and facilities for visitors, and address public risk issues associated with visitor use of the park.

Strategies

Based on current figures and observed trends in visitor numbers, it is unlikely that, during the term of this management plan, the theoretical maximum visitor number (approximately 2,200) would be reached. However, during peak holiday periods, if visitor numbers do approach the maximum figure (based on the number of entry and camping permits issued), DEH will consider limiting visitor entry to ensure that public safety and enjoyment is maintained.

While it has never been necessary to close the park, closure will remain an option. It should be noted that park closures are common in overseas parks when visitor numbers are exceeded. A suitable procedure for closure notification should be developed and implemented equitably.

The majority of camp sites will be provided at the existing Pondalowie and Stenhouse Bay campgrounds, thereby facilitating the progressive provision of improved facilities, including showers, toilets and access to water and telephones, in already developed precincts. A small number of more secluded campsites with minimal facilities at other locations will be provided within the park. Potential impact from development on the surrounding natural habitat will be minimised.

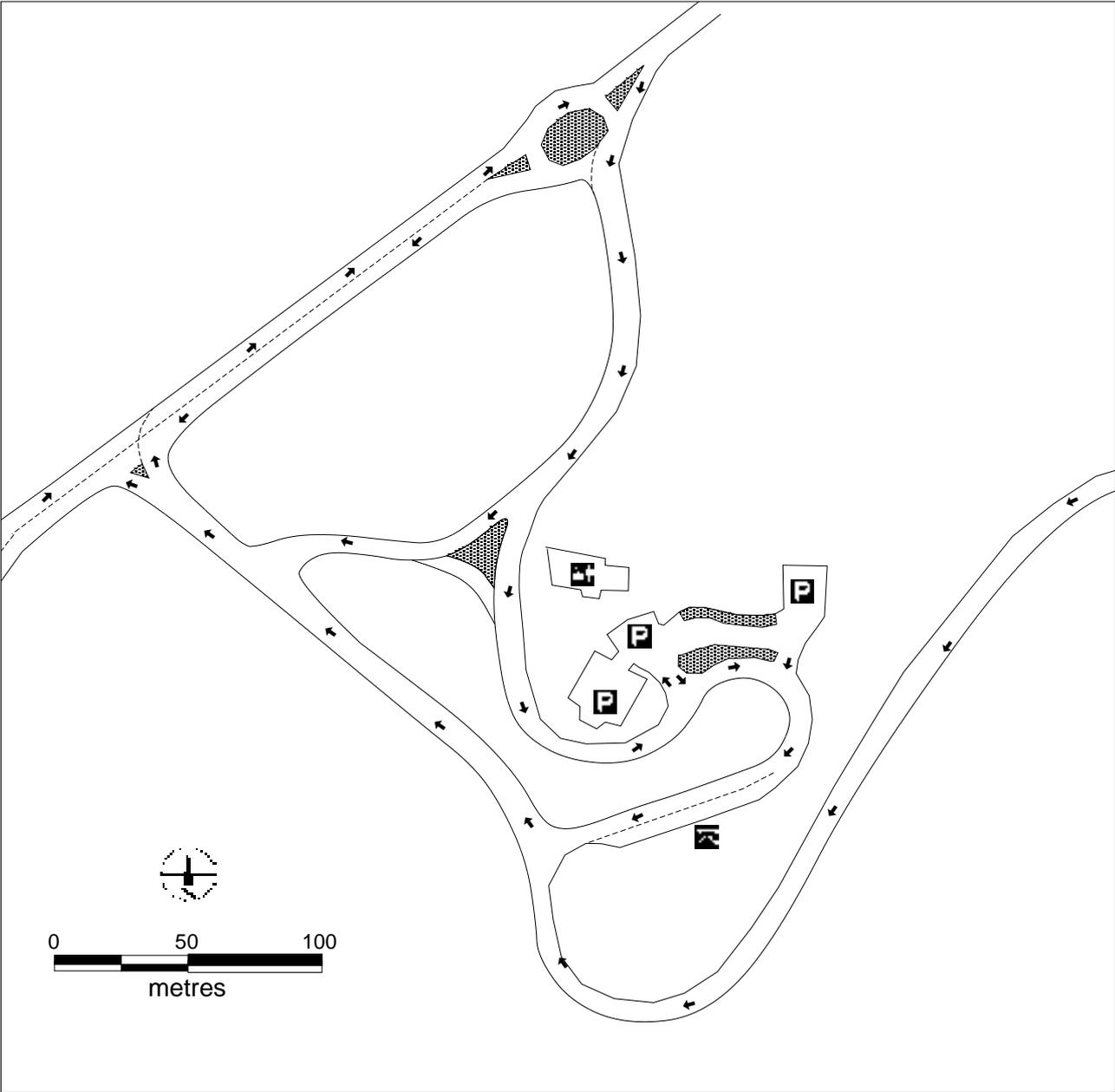
Rhinos Tavern and General Store at Stenhouse Bay provide essential services for visitors and DEH staff. As a key lessee, the 'partnership' arrangement should be maintained with the tavern's proprietor, to ensure that correct information is disseminated to visitors while providing for their accommodation and supply needs.

Actions

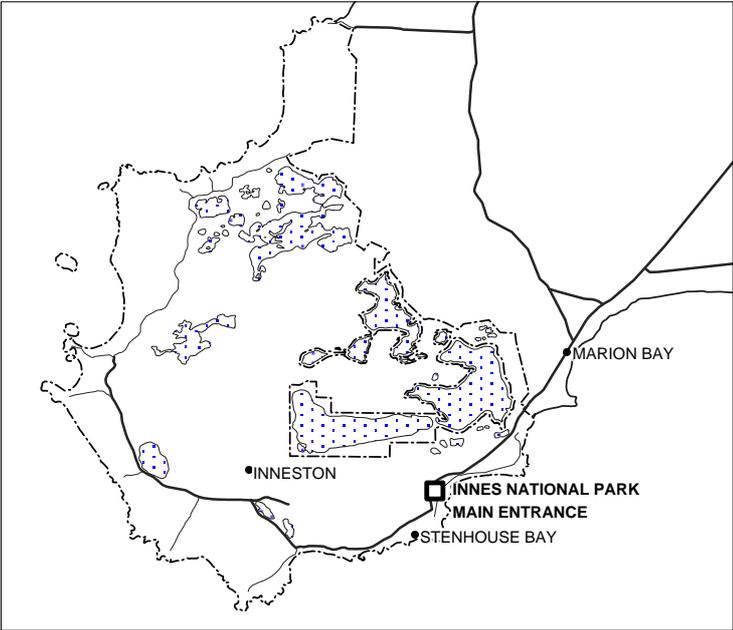
Progressively provide the following, utilising high quality, minimal impact design elements:

Stenhouse Bay Major Facility Node (Figures 5 and 6)

- Stenhouse Bay accommodation area, including campground, toilet, shower and kitchen facilities. Provision will be made for 50 camping sites initially, including bush camping, bus camping, and sites suitable for caravans, boats or trailers. Additional accommodation options may be considered in accordance with demand and sustainable capacity;
- provide bush camping sites with an emphasis on more natural private camping where possible;
- upgrade the Stenhouse Bay tavern carpark and day visit area to accommodate expected visitor numbers;
- provide four to six cabins in the Stenhouse Bay area;
- provide day-visit sites at Stenhouse Bay Jetty and the adjacent beach;
- provide walking trails, interpretive walks and interpretive sites;
- support the maintenance of the Stenhouse Bay Jetty and precinct in a safe and functional state for recreational purposes;
- close and rehabilitate the existing vehicle track to the lookout; and
- rehabilitate and revegetate the Stenhouse Bay Major Facility Node.



LOCATION MAP



- LEGEND
- Parking
 - Headquarters
 - Traffic Direction
 - Self Registration

Figure 5
Innes National Park
New Headquarters and Main Entrance



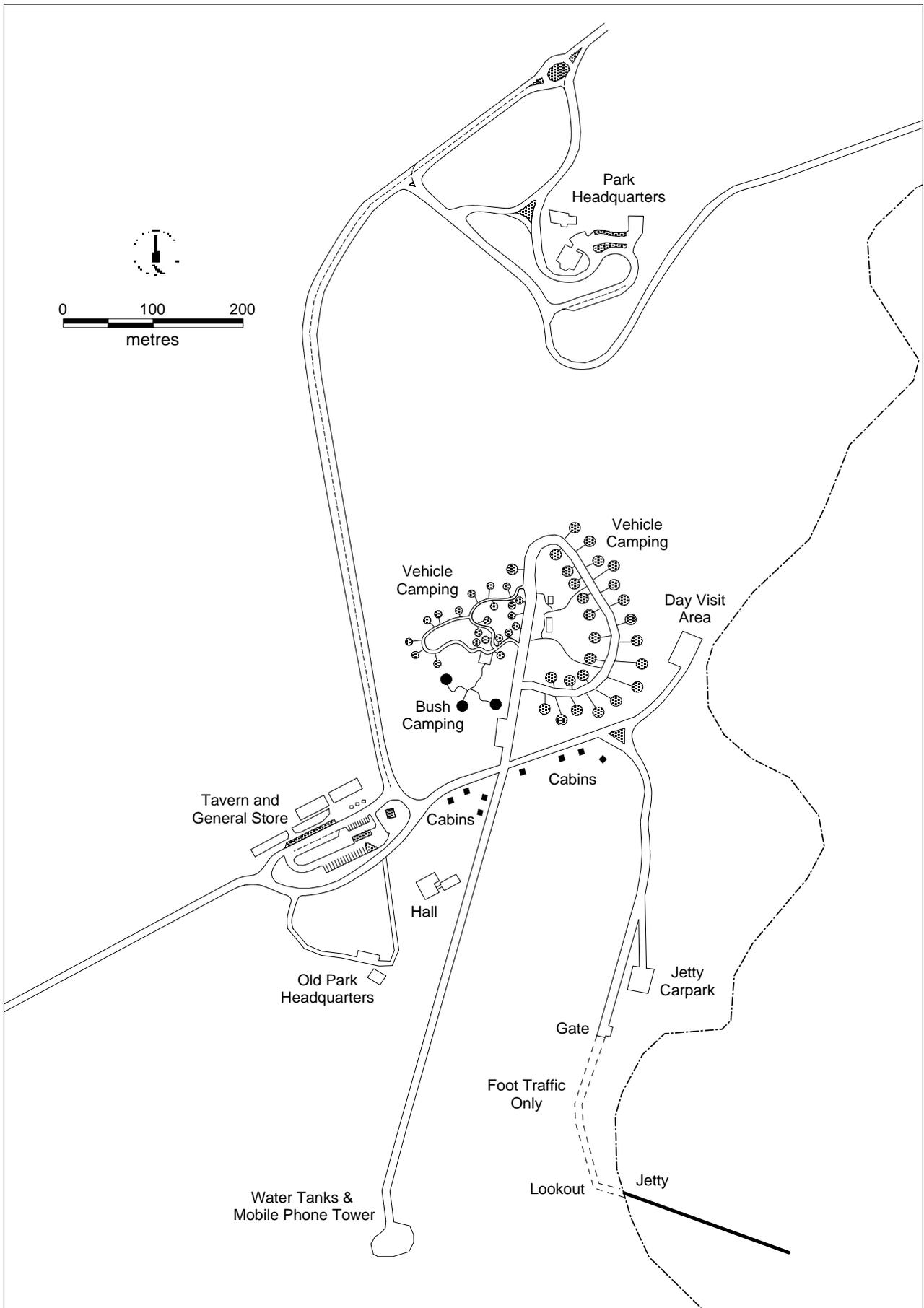


Figure 6

Innes National Park
Stenhouse Bay Presinct

Salt Lake View / Jolly Beach Minor Facility Node

- tertiary access roads;
- small carpark at Salt Lake View for five cars;
- walking trails and signs to facilitate the use of Rhino Head as a day visit site (prohibit camping);
- small carpark for five cars at Jolly Beach; and
- five campsites at Jolly Beach (gas fires only).

Chinamans Hat, Chinamans Reef and Cable Bay Minor Facility Nodes

- sealed road and carparks;
- access for buses and vehicles with trailers;
- a small campground and limited launching facility for small boats at Cable Bay;
- interpretive signs; and
- over flow parking for surfing competitions at nearby Chinamans Reef.

Cape Spencer, The Gap, Ethel Beach and West Cape Major Facility Nodes

- sealed roads and larger carparks;
- formed walking trails, including beach access stairways;
- interpretive and safety signs;
- seating; and
- rehabilitation and revegetation works.

Inneston Major Facility Node

- sealed road and carpark;
- walking trails and interpretive material;
- public amenities and other facilities; and
- progressively implement recommendations of the delegate Innes National Park Visitor Facilities and Services Plan and the Inneston Conservation Plan.

Pondalowie Major Facility Node

Campground

- improve existing and provide additional toilet and shower facilities;
- construct and sign walking trails to both beaches;
- construct additional BBQ facility; and
- consider designating a generator-free section of campground (eastern).

Day Visit Areas and Carparks

- progressively bitumen seal the terminus carpark;
- provide day visitor carparks as part of the redesign of the campground area;
- provide additional toilet facilities adjacent to Fishermans village for use by beach visitors;
- provide direction signs and walking paths to the constructed beach tracks which will cross the dunes; and
- provide shelter and BBQ facilities for coaches.

Surfers Minor Facility Nodes

Campground and Day Visit Area

Surfers campground and carpark should remain a location primarily catering to surfers and fishers. The beach boardwalk and viewing platforms should not be promoted to bus groups engaged in sightseeing. Surfers campground should be modified to improve vehicle access and provide additional day-visit parking and facilities as follows:

- a review and re-alignment, if necessary, of the road layout within the campground;
- an extended day visit carpark (a consolidated rubble surface);
- a limited number of bush campsites and communal campfire sites;
- a pit toilets (sealed base);
- limited water supply;
- interpretive signs; and
- walking trails and boardwalk through to the beach (Surfers).

Casuarina, Dolphin, Shell, Browns and Gym Beaches Minor Facility Nodes

Casuarina, Surfers to Royston Head and Browns Beach to Gym Beach should continue to be regarded as sensitive coastal areas within the Coastal Conservation Zone and only essential facilities or structures should be built in these areas to protect inherent values.

Casuarina is a campground popular for small groups, although it is used opportunistically by single campers. Visitor impact at Casuarina campground has the potential to damage sensitive dune vegetation. The provision of a modest boardwalk between the campground and the beach may alleviate this problem. The use of this campsite should be monitored and closed if necessary (see 4.1 Zoning). The following should be provided:

- a small number of bush campsites;
- boardwalk through dunes to beach;
- pit toilets (sealed base);
- shower facilities;
- interpretive information; and
- self registration facility at Gym Beach.

Table 1 shows the approximate number of day visit carparks, campsites and other facilities, which will be progressively provided, within the park. Each site will be subject to the preparation of detailed site plans, including those for the Stenhouse Bay Precinct, that will also require visitor infrastructure and services plans.

4.6.7 Entry, Camping and Accommodation Fees

Background

Successful natural resource management and provision of tourism and recreation opportunities in a fragile coastal ecosystem requires significant resources. In line with the State Government's user-pays policy, visitors are expected to contribute to the cost of responsible park management.

A self-registration station has always been maintained to issue entry and camping permits. As part of the new visitor centre and park headquarters re-development, the self registration station has been upgraded (see Figure 5). Money received at the station contributes to the General Reserves Trust fund, which is often allocated to park development and management projects.

Objectives

Generate funding for the management of visitors and the provision of facilities.

Strategies

Maintain an efficient self-registration system to collect fees and issue permits, and utilise these funds to assist with park management.

Actions

- Ensure that adequate funding is available to provide and maintain a range of recreational opportunities and facilities.
- Investigate the possibility for all accommodation (cottages, cabins and campgrounds) to be operated under lease by a contractor.
- Monitor and ensure compliance with permit requirements.

Table 1 : Proposed Provision of Visitor Facilities

	Access	Bus Parks	Car Parks	Camp Sites	Toilets & Showers	Picnic Facilities	W/Trails & Signs	Boat Launch (4WD)	Cottages & Cabins
Salt lake view	T		5			Yes	Yes		
Jolly Beach	T		5	5	T				
Stenhouse C.G. (1)	S/F	2		50	T/S		Yes		6 additional cabins
Stenhouse C. G. (2)	S/F	2	25	50	T/S		Yes		
Rhino Tavern	S	2							
Stenhouse Day Visit	F	3	30		T	Yes	Yes		
Chinamans lookout	S	1	5						
Chinamans Beach	S	2	10						
Chinamans surf break	S/F	2 in o/flow	27 + o/flow		T				
Cable Bay	S/F		10	10	T		Yes	Yes	
Cape Spencer	F	1	9						
Inneston	S/F	2	10		T	Yes	Yes		5 existing cottages
The Gap	F	2	14				Yes		
Ethel Beach	F	2	10						
West Cape	F	1	10						
Pondalowie C.G	S/F	5	45	65	T/S	Yes	Yes	Yes	
Casuarina C.G	F			6	T				
Surfers C.G	F			18					
Surfers Carpark	F		30		T				
Dolphin Beach	T		8						
Shell Beach	T		10	8	T				1 existing cottage
Brown Beach	T		20	7					
Gym Beach	F		10	5					
Totals		25	293	224					12

Access: T= track for 2WD vehicles only. S= bitumen sealed. F= formed rubble road providing access for buses and caravans

4.6.8 Information and Interpretation

Background

Information panels and signs are located at most features and sites of interest, with directional signs placed at strategic locations throughout the park.

Brochures are available from the District Office at Stenhouse Bay Headquarters and visitor centre, Rhinos Tavern at Stenhouse Bay, local businesses in the region, and other information centres around the State. Park information may also be obtained from the ParksWeb Internet site.

The development of an integrated interpretation package, incorporating the new visitor centre, is needed to convey information regarding the natural assets of the park, the impacts of inappropriate behaviour and the need to minimise access to sensitive vegetation and wildlife habitat.

Objectives

Provide information to visitors to enhance their experience and to ensure their behaviour does not compromise natural values.

Strategies

An interpretation plan will be prepared and implemented, incorporating the new visitor centre to direct visitors to places of interest throughout the park. Interpretation will be presented through a variety of mediums to engage visitor interest and interactivity, including signs, brochures and interpretive panels. Information and interpretive material will be reviewed regularly and progressively upgraded.

The following visitor information will be provided:

- orientation and basic facility information;
- visitor safety information;
- unique values of the park;
- acceptable behaviour and, where appropriate, provide a short list of inappropriate behaviour;
- recreational opportunities and setting choices; and
- information on the natural and cultural values of the park.

Actions

- Develop an interpretation plan that will incorporate the following;
 - upgrade visitor information facilities at Stenhouse Bay Headquarters, incorporating the new visitor centre and selected locations throughout the park; and
 - appropriate interpretive material such as interpretive panels, brochures and other information.

4.7 Commercial Activities and Other Landuse

4.7.1 Tour Operators

Background

Several commercial tour operators bring visitors into the park for various activities, including fishing, diving, general camping and nature study. All are required to obtain a commercial user's licence to access the park for financial gain.

Objectives

Ensure that commercial tours provide quality visitor experiences that do not compromise park values or the experience of other visitors.

Strategies

Develop and maintain a partnership with commercial tour operators, providing information, assistance and training, to ensure quality visitor experiences while respecting park values.

All commercial tour operators utilising the park are required to obtain an appropriate licence from DEH.

Actions

- Issue permits to commercial tourism operators, provide information, assistance and training to ensure they are able to offer quality experiences to their clients.
- Monitor the impact of commercial tourism on park values.

4.7.2 Stenhouse Bay General Store, Tavern and Hall

Background

The general store, tavern, small garage and the hall at Stenhouse Bay are concession leases with set terms and contract periods with specific conditions. These facilities contribute significantly to visitor satisfaction, and DEH need to work closely and constructively with the lessee.

Objectives

Manage all commercial leases in a manner that is mutually beneficial to all parties.

Manage all commercial leases in a professional manner in accordance with government policy and practices to ensure governance and other legislative requirements are addressed.

Strategies

Maintain liaison with lessees of the Stenhouse Bay commercial enterprises.

Actions

- Monitor and regularly review lease conditions as required.
- Ensure assets are maintained in optimum condition.

4.7.3 Bee Sites

There are five bee sites that have been leased to apiarists in the past. These leases were recently transferred to a new lessee, but it is apparent that they are poorly utilised.

Objectives

Progressively phase out bee sites within Innes National Park under the current agreed policy and management framework.

Strategies

Maintain liaison with apiarists who lease commercial bee sites within the park and ensure that existing bee site management is in accordance with DEH Policy.

Actions

- Implement and monitor the current agreed *Bee Site Policy for National Parks and Wildlife Act and Crown Lands Act Conservation Reserves* (DEH 1997).
- Utilise bee site lease fees to assist with management of reserves where the sites are located and to facilitate research.
- Negotiate with existing lessee to progressively remove bee sites from the park.

4.7.4 Leases and Licences

Within the park, professional fishers and private citizens lease a number of coastal shacks. These shacks pre-date the proclamation of the park, and subject to government policy, are leased for the life of the lessee. DEH will continue to honour those existing lease arrangements. The ultimate long-term intention (after the life-tenures expire) is to remove the shacks and rehabilitate the sites.

At Inneston, leases on cottages are for 5 year terms, subject to annual inspections by appropriate personnel, currently the District Ranger and an additional advisor, such as a Heritage Architect or Regional Property Officer.

Objectives

Achieve effective, on-going partnerships with lessees that are mutually beneficial to all parties.

Manage leases and licences in a professional manner in accordance with government policy and practices to ensure governance and other legislative requirements are addressed.

Strategies

DEH may develop other partnership, lease and concession arrangements if and when there is need or when appropriate opportunities are identified. For example, the management of rental accommodation and rubbish removal could be undertaken by a contractor.

Actions

Coastal Shacks

- Honour existing life tenure arrangements.

Inneston Leases

- Existing five year leases will be available for renewal dependant upon the satisfactory implementation of agreed maintenance schedules.
- Liaise with DC Yorke Peninsula re waste management.
- Explore the potential for a contract waste management service.

4.7.5 Electricity, Telecommunications and Water

Background

A telecommunications tower for mobile phone coverage is located in the park. There are also easements for power lines and water supply. Such infrastructure is of long-standing and operators require access to maintain their facilities.

There is potential for park maintenance work to damage these utilities. Equally, there is potential for park values to be degraded by maintenance work conducted by utility companies.

Objectives

Ensure that ongoing service of utilities is compatible with park values and that utilities are not impacted by park development and maintenance works.

Strategies

Liaise with utility companies to ensure that maintenance programs have minimal impact on park values.

Actions

- Maintain liaison with utility companies and periodically review maintenance programs.
- Maintain accurate records of underground and overhead services to minimise damage through park maintenance and development work.

4.7.6 Marine Navigation Aids

Background

The Australian Maritime Safety Authority (Commonwealth Government) maintains and operates light stations on the mainland at Cape Spencer and West Cape. There are also navaid beacons on South (or Peter) Island in Pondalowie Bay. Operators have a requirement to access and maintain these facilities.

Objectives

Ensure that operation and maintenance of navaids within park boundaries does not compromise the values of the park.

Strategies

Maintain liaison with Commonwealth officers who service the navaid facilities within the park and ensure that their operations are compatible with park values.

Actions

- Continue the established partnership arrangements with the operators of navaid facilities within the park.

4.7.7 Mining Leases

Background

The Innes National Park proclamation does not permit mining licences within the park. However, when the park was proclaimed, several salinas were excluded to allow the continuation of gypsum mining and are enclosed within the park. The mines continued to operate until recently.

Mining operations have been undertaken with due sensitivity, at least in recent times, to the surrounding values of the park. Mine operators have contributed to park management by donating road building materials.

Objectives

Ensure that mining does not diminish biodiversity values or interfere with visitor enjoyment.

Strategies

Continue to develop and maintain cooperative management arrangements with the operators of the gypsum mining operation.

Actions

- Continue the established partnership with the operators of the gypsum mine.
- Ensure that statutory requirements for environmental impact reporting are addressed for any future expansion or escalation of mining activity.
- Seek to resume mining leases that have expired and add them to the park.

4.8 Management Arrangements

4.8.1 Partnerships and Cooperative Management

Background

The Department for Environment and Heritage supports and promotes partnerships and cooperative management arrangements to establish integrated natural resource management. This requires the development of substantial working relationships with government agencies, local authorities and local communities.

With regard to Innes National Park this involves developing working relationships with neighbours, local land managers, Heritage Agreement owners, the representative Aboriginal Heritage Committee and mining owners. DEH also recognises the importance of developing ongoing partnership arrangements, participating in regional management programs and contributing to community organisations and boards including, Landcare groups, Soil Conservation Boards, Animal and Plant Control Boards and Local Government.

DEH is committed to reconciliation and to the development of partnerships with the Narungga community to cooperatively manage Innes National Park in a way that respects both contemporary and traditional culture, knowledge and skills. Partnerships involve the delivery of programs that promote reconciliation, cultural awareness, Indigenous employment and training, cooperative management and Indigenous cultural heritage management on parks.

Furthermore, the South Australian Government is keen to pursue Indigenous Land Use Agreements (ILUAs) which are voluntary agreements between native title groups and other people about the use and management of country. For Innes National Park such agreements would be between the Narungga Aboriginal Heritage Committee for the land comprising the park and the South Australian Government.

Partnership arrangements should be developed to provide a positive direction for the shared development and management of the park to fulfil the objectives of this plan.

Objectives

Develop and maintain partnerships and/or working relationships with organisations, statutory bodies and others to assist with the management of the park and help fulfil the reserve's potential without compromising its natural values.

Actions

- Consult with the local council, relevant management boards, the local community and other relevant bodies to explore the benefits of partnership arrangements that will support future management decisions on issues of common interest.
- Involve the Narungga community in the cooperative management of the reserve and their Indigenous cultural heritage.
- Encourage and contribute to the development of partnership arrangements to integrate biodiversity and recreation management in the region, with organisations that have an interest in contributing to the sustainable management of the park.
- Promote discussion with Indigenous people who have a traditional association with the land comprising the park to better understand and appreciate their culture, lifestyle and knowledge of the reserve.

4.8.2 Community and Volunteer Involvement

Background

Community involvement in conservation comes through their participation in advisory groups, consultative processes, Friends of Parks and volunteers.

The Friends of Innes National Park were formed on 14 November 1986. Since their inception, they have been involved in numerous park support programs, including:

- flora and fauna surveys;
- weed control;
- revegetation;
- heritage building restoration;
- walking trail construction; and
- public relations and dune rehabilitation.

Their ongoing commitment to Innes National Park has been invaluable, and DEH gratefully acknowledges their help.

In addition, tertiary students from Germany, the RAAF and other individuals have established a tradition of undertaking programs in the park.

Objectives

Encourage and support the involvement of volunteer organisations and individuals in the development of conservation programs under the supervision of DEH.

Strategies

Continue to support the involvement of the Friends of Innes National Park and international students in park programs, and encourage other organisations and individuals to contribute.

Actions

- Encourage the Friends of Innes National Park and other appropriate volunteers to continue their voluntary contribution to park management.

4.9 Future Directions

4.9.1 Additional Land

Background

The conservation and protection of biodiversity in South Australia is being achieved through a suite of mechanisms, both public and private. For example, the reserve system is complemented by the Heritage Agreement system operating on private land. Successful conservation of biodiversity on Southern Yorke Peninsula will only be achieved through partnerships between private landowners and government that develop and maintain regional linkages.

There are areas of native vegetation adjacent to the park that may be useful additions, either to improve boundary alignment or to contribute to biodiversity conservation. DEH may investigate and purchase some small extensions to the park, if and when they come onto the market, subject to the availability of funds and subject to the value of the land in terms of biodiversity values or strategic importance for achieving improved reserve management.

In a regional context, DEH should endeavour to work cooperatively with landholders of properties with native vegetation to achieve optimum biodiversity outcomes.

Objectives

Achieve maximum biodiversity conservation and optimal reserve boundaries for management purposes.

Strategies

DEH will seek to take actions that assist in maximising biodiversity conservation and effective management.

Actions

- Integrate management of the park with regional biodiversity conservation and similar programs.
- Investigate suitability of land for addition to the park.

5 SUMMARY OF MANAGEMENT ACTIONS

Action	Priority	Duration
Zoning		
Adopt and implement the zoning plan shown in Figure 3.	High	12 months
If management actions proposed within this plan fail to prevent dune degradation, seek ministerial approval to formally designate Prohibited Area Zone(s).	Medium	Ongoing
Natural Resources		
Geology and Landform		
Include geological and mining information in visitor programs and materials.	Medium	12 months
Investigate the possibility of incorporating the excluded gypsum lakes in the park.	Low	5 years
Soils		
Consider the potential for soil erosion when planning visitor access or undertaking management activities and development works.	High	Ongoing
Progressively provide a system of walking trails and beach-access paths, the final routes dependent on the preparation and implementation of a walking trail plan.	High	2 years
Provide interpretive material to inform visitors of the fragile nature of sand dune vegetation and encourage visitors to use the walking trails provided.	High	Ongoing
Monitor the impact of foot traffic in dune areas. If an educational approach fails to prevent excessive intrusion into Sand Dune Protection Zones, consider gazetting the zones as Prohibited Areas under section 42 of the <i>National Parks and Wildlife Act 1972</i> .	High	Ongoing
Native Vegetation		
Direct and confine visitor access so that vehicles and walkers do not cause unacceptable impact on sensitive dune vegetation. Initially, this will be done with appropriate and low-key barriers and by interpretive signs that explain the issue for visitors.	High	Ongoing
Undertake comprehensive vegetation mapping to determine key associations and wildlife habitats and to provide a strategic basis for threat abatement programs.	High	2 years
Record on a database the location and distribution of plants of conservation significance, monitor the populations and implement species management programs if necessary.	High	Ongoing
Encourage natural regeneration, undertaking revegetation in disturbed sites in association with pest plant control if necessary.	High	Ongoing

Action	Priority	Duration
Native Fauna		
Encourage appropriate volunteer groups and individuals to conduct fauna surveys and population monitoring.	High	Ongoing
Record on a database with GIS capability, animal species and habitats, including opportunistic sightings of rare and endangered fauna. Monitor populations of species of conservation significance and, where necessary, develop and implement management plans to ensure their conservation.	High	Ongoing
Comply with and contribute to the National Recovery Plan for Malleefowl, as required under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> .	High	Ongoing
Continue to monitor kangaroo numbers, assess population trends and endeavour to understand their contribution to the total grazing pressure on vegetation in the park.	High	Ongoing
Contribute to an integrated regional kangaroo management program, culling if necessary, to maintain a sustainable population that is considered natural for the vegetation types of the park.	High	Ongoing
Introduced Plants		
Record the location of introduced plant populations on a database with GIS capability and monitor their spread.	High	Ongoing
Undertake control measures and where feasible, eradicate introduced plants, initially directing resources towards protecting areas that are currently least affected.	High	Ongoing
Initiate and maintain communication with local government, district Animal and Plant Control Board, and neighbouring landowners, with the aim of integrating pest plant management programs on a regional basis.	High	Ongoing
Introduced Animals		
Undertake effective introduced animal control programs and undertake systematic monitoring of populations.	High	Ongoing
Encourage and contribute to regional introduced animal control programs.	High	Ongoing
Cultural Heritage		
Consult Narungga people who have a traditional association with the land, Native Title Claimants and relevant State and Federal Aboriginal heritage authorities, in decisions regarding the management of Narungga cultural heritage.	High	Ongoing
Before proceeding with any development works within the reserve, obtain an assessment and clearance from the appropriate authority, under the provisions of the <i>Aboriginal Heritage Act 1988</i> .	High	Ongoing
Identify, record, protect restore and monitor known or relocated sites and items of archaeological, anthropological, cultural and historical significance located in the park, in cooperation with the Department for Aboriginal Affairs and Reconciliation, the Heritage branch of DEH and other relevant authorities and organisations. Narungga and historic cultural heritage sites require conservation plans to facilitate appropriate management.	High	Ongoing

Action	Priority	Duration
In consultation with the Narungga community and other relevant authorities, research and inventory, cultural and historic sites and stories that relate to the park and where appropriate, develop interpretive material and tourism programs for visitors. Interpretive material may include web-site, brochures, site signage and displays.	Medium	Ongoing
Consult Narungga people who have a traditional association with the land comprising the park to determine the appropriateness of naming park features using both Narungga and existing names.	Med	Short
Seek funding to employ an historian to gather the available oral history of the park.	Low	3 years
Encourage and support archaeological, anthropological and historic studies within the park. All sites located should during these surveys should be recorded to the standards set by the Heritage branch of DEH and/or DAARE and submitted for inclusion on the DAARE Central Archive and/or State Heritage Register.	High	Ongoing
Establish, with professional guidance, a priority action list for site conservation at Inneston and Stenhouse Bay to conserve and manage heritage buildings and objects in accordance with the Burra Charter (Australia ICOMOS 1981).	Low	Ongoing
Commission a conservation plan for the heritage of the park as a sub-section of a visitor infrastructure and services plan.	Low	3 years
Fire Management		
Comply with provisions of the <i>Country Fires Act 1989</i> .	High	Ongoing
Develop and regularly update a bushfire prevention plan for the park, in association with local CFS officers and neighbouring landowners.	High	Ongoing
As part of the bushfire prevention plan, establish and regularly review a park visitor protection and evacuation plan to be implemented in the event of a serious bushfire.	High	Ongoing
Maintain existing fire access tracks and only create new tracks if there is no alternative means to prevent the loss of life or property.	High	Ongoing
Maintain water points, windmills, tanks and other water sources necessary for bushfire suppression.	High	Ongoing
Ensure visitors comply with fire restrictions during the fire danger season.	High	Ongoing
Provide well defined campfire sites within camping areas.	High	Ongoing
Prohibit the collection of local firewood and provide interpretive material to explain its importance to wildlife.	High	Ongoing
Encourage visitors to supply their own fuel and continue to make alternative fuel available for sale.	High	Ongoing
Monitor the impact of campfires and in the event that damage to biodiversity, habitat or visual amenity becomes significant, contemplate implementing a more sustainable regime.	High	Ongoing

Action	Priority	Duration
Infrastructure and Built Assets		
Comply with provisions of the <i>Development Act 1993</i> .	High	Ongoing
Maintain a Risk Register for Innes National Park.	High	2 years
Recreation and Tourism		
Visitor Use		
Continue to undertake surveys to ascertain visitor requirements.	Medium	3 years
Develop programs to address visitor needs that provide education and enjoyment without compromising the conservation of park values.	Medium	3 years
Vehicle Access		
Maintain 2WD bitumen-sealed access road from the park entrance to Pondalowie Bay and upgrade carparks within the park.	High	Ongoing
Progressively improve access and landscape vistas by bitumen-sealing the secondary roads to Cape Spencer, the Gap and West Cape.	Medium	3 years
Continue to maintain the tertiary road and carparks from Pondalowie Bay to Browns Beach. Consideration will be given to upgrading this road to minimise public risk issues, environmental impact and maintenance costs.	Medium	Ongoing
Maintain a system of fire and management access tracks.	High	Ongoing
Encourage visitors to use designated walking trails, particularly through the dune areas.	High	Ongoing
Monitor foot traffic in the dune areas and if current measures fail to confine walkers to designated routes, contemplate the possibility of formally gazetted a Prohibited Area (see 4.1 Zoning) under the provisions of section 42 of the <i>National Parks and Wildlife Act</i> . Visitors who continue to sand board and walk in the dunes, causing increased erosion and vegetation loss, would then be liable for prosecution as part of a compliance strategy.	High	Ongoing
Progressively provide a system of walking trails and beach-access paths within the park, with final routes to be chosen following detailed planning.	Medium	3 years
Boat Access		
Monitor boat use at Pondalowie Bay and implement measures considered necessary to maintain biodiversity values and visitor experiences.	High	Ongoing
Walking Trails		
Develop and implement a delegate plan for walking trails that safeguards environmental values and provides quality visitor experiences.	High	12 months

Action	Priority	Duration
Visitor Facilities		
<p>Progressively provide the following, utilising high quality, minimal impact design elements:</p> <p><u>Stenhouse Bay Major Facility Node (Figures 5 and 6)</u></p> <ul style="list-style-type: none"> • Stenhouse Bay accommodation area, including campground, toilet, shower and kitchen facilities. Provision will be made for 50 camping sites initially, including bush camping, bus camping, and sites suitable for caravans, boats or trailers. Additional accommodation options may be considered in accordance with demand and sustainable capacity; • provide bush camping sites with an emphasis on more natural private camping where possible; • upgrade the Stenhouse Bay tavern carpark and day visit area to accommodate expected visitor numbers; • provide four to six cabins in the Stenhouse Bay area; • provide day-visit sites at Stenhouse Bay Jetty and the adjacent beach; • provide walking trails, interpretive walks and interpretive sites; • support the maintenance of the Stenhouse Bay Jetty and precinct in a safe and functional state for recreational purposes; • close and rehabilitate the existing vehicle track to the lookout; and • rehabilitate and revegetate the Stenhouse Bay Major Facility Node. 	High	3 years
<p><u>Salt Lake View / Jolly Beach Minor Facility Node</u></p> <ul style="list-style-type: none"> • tertiary access roads; • small carpark at Salt Lake View for five cars; • walking trails and signs to facilitate the use of Rhino Head as a day visit site (prohibit camping); • small carpark for five cars at Jolly Beach; and • five campsites at Jolly Beach (gas fires only). 	High	3 years
<p><u>Chinamans Hat, Chinamans Reef and Cable Bay Minor Facility Nodes</u></p> <ul style="list-style-type: none"> • sealed road and carparks; • access for buses and vehicles with trailers; • a small campground and limited launching facility for small boats at Cable Bay; • interpretive signs; and • over flow parking for surfing competitions at nearby Chinamans Reef. 	High	3 years
<p><u>Cape Spencer, The Gap, Ethel Beach and West Cape Major Facility Nodes</u></p> <ul style="list-style-type: none"> • sealed roads and larger carparks; • formed walking trails, including beach access stairways; • interpretive and safety signs; • seating; and • rehabilitation and revegetation works. 	High	3 years

Action	Priority	Duration
<p><u>Inneston Major Facility Node</u></p> <ul style="list-style-type: none"> • sealed road and carpark; • walking trails and interpretive material; • public amenities and other facilities; and • progressively implement recommendations of the delegate Innes National Park Visitor Facilities and Services Plan and the Inneston Conservation Plan. 	High	3 years
<p><u>Pondalowie Major Facility Node</u></p> <p><u>Campground</u></p> <ul style="list-style-type: none"> • improve existing and provide additional toilet and shower facilities; • construct and sign walking trails to both beaches; • construct additional BBQ facility; and • consider designating a generator-free section of campground (eastern). 	High	3 years
<p><u>Day Visit Areas and Carparks</u></p> <ul style="list-style-type: none"> • progressively bitumen seal the terminus carpark; • provide day visitor carparks as part of the redesign of the campground area; • provide additional toilet facilities adjacent to Fishermans village for use by beach visitors; • provide direction signs and walking paths to the constructed beach tracks which will cross the dunes; and • provide shelter and BBQ facilities for coaches. 	High	3 years
<p><u>Surfers Minor Facility Nodes</u></p> <p><u>Campground and Day Visit Area</u></p> <ul style="list-style-type: none"> • a review and re-alignment, if necessary, of the road layout within the campground; • an extended day visit carpark (a consolidated rubble surface); • a limited number of bush campsites and communal campfire sites; • a pit toilets (sealed base); • limited water supply; • interpretive signs; and • walking trails and boardwalk through to the beach (Surfers). 	High	3 years
<p><u>Casuarina, Dolphin, Shell, Browns and Gym Beaches Minor Facility Nodes</u></p> <ul style="list-style-type: none"> • a small number of bush campsites; • boardwalk through dunes to beach; • pit toilets (sealed base); • shower facilities; • interpretive information; and • self registration facility at Gym Beach. 	High	3 years

Action	Priority	Duration
Entry, Camping and Accommodation Fees		
Ensure that adequate funding is available to provide and maintain a range of recreational opportunities and facilities.	High	Ongoing
Investigate the possibility for all accommodation (cottages, cabins and campgrounds) to be operated under lease by a contractor.	Medium	12 Months
Monitor and ensure compliance with permit requirements.	High	Ongoing
Information and Interpretation		
<ul style="list-style-type: none"> • Develop an interpretation plan that will incorporate the following; <ul style="list-style-type: none"> - upgrade visitor information facilities at Stenhouse Bay Headquarters, incorporating the new visitor centre and selected locations throughout the park; and - appropriate interpretive material such as interpretive panels, brochures and other information. 	High	3 years
Commercial Activities and Other Landuse		
Tour Operators		
Issue permits to commercial tourism operators, provide information, assistance and training to ensure they are able to offer quality experiences to their clients.	Medium	Ongoing
Monitor the impact of commercial tourism on park values.	Medium	Ongoing
Stenhouse Bay General Store, Tavern & Hall		
Monitor and regularly review lease conditions as required.	Low	Ongoing
Ensure assets are maintained in optimum condition.	Medium	Ongoing
Bee Sites		
Implement and monitor the current agreed <i>Bee Site Policy for National Parks and Wildlife Act and Crown Lands Act Conservation Reserves</i> .	Medium	Ongoing
Utilise bee site lease fees to assist with management of reserves where the sites are located and to facilitate research.	High	Ongoing
Negotiate with existing lessee to progressively remove bee sites from the park.	Medium	1-2 years
Leases and Licences		
<u>Coastal Shacks</u> Honour existing life tenure arrangements.	High	Ongoing
<u>Inneston Leases</u> Existing five year leases will be available for renewal dependant upon the satisfactory implementation of agreed maintenance schedules.	High	Ongoing
Liaise with DC Yorke Peninsula re waste management.	Medium	12 Months
Explore the potential for a contract waste management service.	Medium	12 Months

Action	Priority	Duration
Electricity, Telecommunications & Water		
Maintain liaison with utility companies and periodically review maintenance programs.	Medium	Ongoing
Maintain accurate records of underground and overhead services to minimise damage through park maintenance and development work.	High	Ongoing
Marine Navigation Aids		
Continue the established partnership arrangements with the operators of navaid facilities within the park.	High	Ongoing
Mining Leases		
Continue the established partnership with the operators of the gypsum mine.	High	Ongoing
Ensure that statutory requirements for environmental impact reporting are addressed for any future expansion or escalation of mining activity.	High	Ongoing
Seek to resume mining leases that have expired and add them to the park.	High	Ongoing
Management Arrangements		
Partnerships and Cooperative Management		
Consult with the local council, relevant management boards, the local community and other relevant bodies to explore the benefits of partnership arrangements that will support future management decisions on issues of common interest.	High	Ongoing
Involve the Narungga community in the cooperative management of the reserve and their Indigenous cultural heritage.	High	Ongoing
Encourage and contribute to the development of partnership arrangements to integrate biodiversity and recreation management in the region, with organisations that have an interest in contributing to the sustainable management of the park.	High	Ongoing
Promote discussion with Indigenous people who have a traditional association with the land comprising the park to better understand and appreciate their culture, lifestyle and knowledge of the reserve.	High	Ongoing
Community and Volunteer Involvement		
Encourage the Friends of Innes National Park and other appropriate volunteers to continue their voluntary contribution to park management.	High	Ongoing
Future Directions		
Additional Land		
Integrate management of the park with regional biodiversity conservation and similar programs.	High	Ongoing
Investigate suitability of land for addition to the park.	Medium	Ongoing

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Other Documents

Innes National Park, Various files and natural resource mapping and inventory records.

Innes National Park; Visitor records and surveys.

Personal Communication

Heidi Crow, Project Officer, Department for Aboriginal Affairs and Reconciliation

Leanne Liddle, Aboriginal Partnerships, Department for Environment and Heritage.

Narungga Aboriginal Heritage Committee.

APPENDIX A : LEGISLATION, CONVENTIONS AND AGREEMENTS

South Australia
<i>Aboriginal Heritage Act 1988</i>
<i>Animal and Plant Control Act (Agricultural Protection and Other Purposes) 1986</i>
<i>Biological Control Act 1986</i>
<i>Catchment Water Management Act 1995</i>
<i>Coast Protection Act 1972</i>
<i>Country Fires Act 1989</i>
<i>Equal Opportunity Act 1984</i>
<i>Environment Protection Act 1993</i>
<i>Development Act 1993</i>
<i>Harbors and Navigation Act 1993</i>
<i>Heritage Act 1993</i>
<i>Historic Shipwrecks Act 1981</i>
<i>Mining Act 1971</i>
<i>National Trust of South Australia Act 1955</i>
<i>Native Title (South Australia) Act 1994</i>
<i>Native Vegetation Act 1991</i>
<i>Occupational Health, Safety and Welfare Act 1986</i>
<i>Petroleum Act 1940</i>
<i>Prevention of Cruelty to Animals Act 1985</i>
<i>Roads (Opening and Closing) Act 1991</i>
<i>Recreational Greenways Act 2000</i>
<i>Soil Conservation and Land Care Act 1989</i>
<i>Water Resources Act 1997</i>
<i>Wilderness Protection Act 1992</i>
Commonwealth
<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i>
<i>Disability Discrimination Act 1992</i>
<i>Environment Protection and Biodiversity Conservation Act 1999</i>
<i>Native Title Act 1993</i>
<i>Natural Heritage Trust Act 1996</i>
International
Japan / China Australia Migratory Bird Agreements (JAMBA, CAMBA)
Ramsar Convention
World Heritage Convention

APPENDIX B : INNES NATIONAL PARK – LAND TENURE HISTORY

Historical Land Tenure - Innes National Park (Tenure History Search - Ian Neville 20/11/1997)

Innes National Park is composed of Sections: 13,57,76,83, 88-89, 93, 95, 99, 100-102, 104, 107, 116, 121, 124-128, 131-136, 138-139 and Allotment A in Deposited Plan 32565 in the Hundred of Warrenben and Sections 958-959, North Out of Hundreds.

Sections 85-87 were dedicated as a reserve for recreation and camping and Section 88 was dedicated as a reserve for recreation, under the control of the district council of Warooka, by virtue of the *Crown Lands Act 1929* in *Gazette* 16/12/1965 page 2097.

Sections 85-87 were resumed and reserved for recreation purposes and for the provision of sites for camping and holiday accommodation, under the control of the district council of Warooka, by virtue of the *Crown Lands Act 1929* in *Gazette* 8/12/1966 page 2153.

Sections 958-959 (Middle and Royston Island respectively) were dedicated as a fauna reserve in gazette 16/3/1967 under the *Crown Lands Act 1929* in *Gazette* 16/3/1967 page 961.

Sections 92-95 were reserved for recreation purposes under the control of the district council of Warooka, by virtue of the *Crown Lands Act 1929* in *Gazette* 8/12/1966 page 2153.

Sections 99-102 were declared a national park and named Innes National Park under the *National Parks Act 1966* in *Gazette* 5/3/1970 page 926.

Sections of road as depicted on Road Tracing 6002 and lettered F (later numbered section 76), H and J (later numbered 57) were closed in gazette 30/4/1970 page 1610.

Sections 85-88 and 92-95 were declared a fauna reserve under the *Fauna Conservation Act 1964* in *Gazette* 26/11/1970 page 2457.

Sections 99-102, Hundred of Warrenben and islands of Pondalow Bay (excluding South Island, being section 88), later numbered sections 958 Out of Hundreds (Middle Island) and (59 Out of Hundreds (Royston Island) were constituted as Innes National Park under the *National Parks and Wildlife Act 1972* page 40.

Reserves for recreation purposes over sections 85-87 and 92-95 plus the recreation reserve over section 88 and the whole of the 150 link coast reserves adjoining sections 85-87 were resumed under the *Crown Lands Act 1929* in *Gazette* 17/6/1976 page 3061.

Sections 13,57,76,83,88-89,93,95,104,107,116,121,124-128 and 131-132 were constituted as Innes National Park under the *National Parks and Wildlife Act 1972* in *Gazette* 2/6/1977 page 1581.

Sections 83,89,104,107,124 and 126 were placed under the care, control and management of the Minister of Environment and Planning under section 44(3) of the *Harbours Act 1936* in *Gazette* 23/6/1983 page 1712.

This further proclamation was revoked under section 44(5) of the Harbours Act, 1936 and the said sections were constituted as Innes National Park under the *National Parks and Wildlife Act 1972* in *Gazette* 24/5/1984 page 1261.

Part sections 101,125 and 131 being “Inneston Gypsum Complex” were entered on the Register of State Heritage Items in *Gazette* 14/8/1986 pages 537 and 538.

Allotment A in Deposited Plan 32565 was added to Innes National Park under the *National Parks and Wildlife Act 1972* Part 3 in *Gazette* 4/11/1993 page 2147.

Hundred of Warrenben (proclaimed 24/1/1878)

Sec/Lot	Previously	Title/Crown lease	Date Issued	Terminated
13	Crown Land	PE 412	1/1/1856	31/12/1869
	13	M13240,CL1275/45	19/12/1962	18/12/1972
57 and 76	Closed Road	Closed in G.G.30/4/1970 p1610 Tracing 6002		
83	Crown Land	PE314	1/1/1854	31/12/1867
89	Crown Land	PE314	1/1/1854	31/12/1867
	Crown Land	PE412	1/1/1856	31/12/1869
93	37	OP15983,CL871/29	1/9/1937	26/9/1969
95	Crown Land	PE412	1/1/1856	31/12/1869
	Water Reserve	Dedicated G.G. 30/8/1894 p425		
		Resumed G.G. 29/1/1970 p419		
99	1	OP 4427, CL 401/45	11/9/1899	26/9/1969
100	1 and 26	OP 4427, CL 401/45	11/9/1899	26/9/1969
	Closed Road	Closed in G.G. 8/1/1970 p87 Tracing 5965		
101	Crown Land	PE314	1/1/1854	31/12/1869
	Crown Land	PE412	1/1/1856	31/12/1869
	1 and 26	OP 4427, CL 401/45	11/9/1899	26/9/1969
	19	OP 5897, CL 455/23	19/2/1902	16/6/1917
	23	OP 10675, CL 555/31	1/8/1908	26/9/1969
	24,36 and 37	OP 15983, CL 871/29	1/9/1937	26/9/1969
	1, 17 and 26	Roads opened in G.G. 19/12/1968 p2746. Tr 5805		
	Closed Road	Closed in G.G. 8/1/1970 p87 Tracing 5965		
	Water Reserve	Dedicated G.G. 30/8/1894 p425		
		Resumed G.G 29/1/1970 p419		
102	35	OP 15983, CL 871/29	1/9/1937	26/9/1969
	77	OP 10675, CL 555/31	1/8/1908	26/9/1969
	Closed road	Closed in G.G. 8/1/1970 p87 Tracing 5965		
104	Crown Land	PE 412	1/1/1856	31/12/1869
	Crown Land	PE1162 (Not Held)	1/1/1861	31/12/1875
107 and 116	Crown Land	PE314	1/1/1854	31/12/1867
121	1	OP4427,CL401/45	11/9/1899	26/9/1969
124	26b	OP4427,CL401/45	11/9/1899	26/9/1969
	150 link Res	PE314	1/1/1854	31/12/1867
125	1	CT4050/417	14/10/1975	9/3/1976
126	35	OP15983,CL 871/29	1/9/1937	26/9/1969
	150 link Res	PE314	1/1/1854	31/12/1867

Sec/Lot	Previously	Title/Crown lease	Date Issued	Terminated
127	Crown Land	PE412	1/1/1856	31/12/1869
	9, 25, 47, 51 55	CT 4001/929	12/10/1973	9/3/1976
128	Crown Land	PE412	1/1/1856	31/12/1869
	21-22 and 84	OM 13240, CL 1275/45	19/12/1962	18/12/1972
131	Crown Land	PE 314	1/1/1854	31/12/1867
	Crown Land	PE412	1/1/1856	31/12/1869
	2	CT 4001/929	12/10/1970	9/3/1976
	50	CT 3683/95	16/2/1973	9/3/1976
	Closed Road	CT 3683/95	16/2/1970	9/3/1976
133-136 and 138-139	Closed Road	Closed in G.G. 25/11/1976 p1771 Tracing 7048		
Lot A Deposited Plan 32565	Closed Road	Closed in G.G. 10/9/1992 p1069 DP 32565		
		Out of Hundreds		
958	Middle Island	No Tenure		
959	Royston Island	No Tenure		

APPENDIX C : INNES NATIONAL PARK – NATIVE PLANT SPECIES

Species marked with an ❖ have been recorded for the park but are unverified by DEH.

Species	Common Name	Conservation Status			
		EPBC Act	NP&W Act	Regional	
				YP	❖
<i>Acacia anceps</i>	Angled Wattle				
<i>Acacia anceps x nematophylla</i>	Hybrid Wattle				
<i>Acacia ancistrophylla</i> var. <i>lissophylla</i>	Hook-leaf Wattle			K	
<i>Acacia argyrophylla</i>	Silver Mulga-bush			R	
<i>Acacia brachybotrya</i>	Grey Mulga-bush			U	
<i>Acacia cupularis</i>	Cup Wattle				
<i>Acacia leiophylla</i>	Coast Golden Wattle				
<i>Acacia longifolia</i> var. <i>sophorae</i>	Coastal Wattle				
<i>Acacia nematophylla</i>	Coast Wallowa				
<i>Acacia rupicola</i>	Rock Wattle				
<i>Acacia spinescens</i>	Spiny Wattle				
<i>Acacia triquetra</i>	Mallee Wreath Wattle				
<i>Acaena echinata</i>	Sheep's Burr				
<i>Acaena ovina</i> var. <i>velutina</i>	Downy Sheep's Burr				
<i>Acianthus pusillus</i>	Mosquito Orchid				
<i>Acrotriche affinis</i>	Ridged Ground-berry			U	
<i>Acrotriche cordata</i>	Blunt-leaf Ground-berry				
<i>Acrotriche patula</i>	Prickly Ground-berry				
<i>Adriana klotzschii</i>	Coast Bitter-bush				
<i>Agrostis aemula</i>	Blown-grass				
<i>Agrostis avenacea</i> var. <i>avenacea</i>	Common Blown-grass				
<i>Allocasuarina muelleriana</i> ssp. <i>muelleriana</i>	Common Oak-bush			K	
<i>Allocasuarina pusilla</i>	Dwarf Oak-bush			R	
<i>Allocasuarina verticillata</i>	Drooping Sheoak				
<i>Alyxia buxifolia</i>	Sea Box				
<i>Amyema melaleucaea</i>	Tea-tree Mistletoe				
<i>Angianthus preissianus</i>	Salt Angianthus				
<i>Aphanes australiana</i>	Australian Piert			U	
<i>Apium annuum</i>	Annual Celery				
<i>Apium prostratum</i> ssp. <i>prostratum</i>	Native Celery				
<i>Atriplex cinerea</i>	Coast Saltbush				
<i>Atriplex paludosa</i> ssp. <i>cordata</i>	Marsh Saltbush				
<i>Beyeria lechenaultii</i>	Pale Turpentine Bush				
<i>Billardiera sericophora</i>	Silky Apple-berry			U	
<i>Brachycome cuneifolia</i>	Wedge-leaf Daisy			U	
<i>Brachycome exilis</i>	Slender Daisy			U	
<i>Brachycome goniocarpa</i>	Dwarf Daisy			U	
<i>Bromus arenarius</i>	Sand Brome			U	

Species	Common Name	Conservation Status			
		EPBC Act	NP&W Act	Regional	
				YP	❖
<i>Bulbine semibarbata</i>	Small Leek-lily				
<i>Bursaria spinosa</i>	Sweet Bursaria				
<i>Caladenia bicalliata</i>	Western Daddy-long-legs		R	R	
<i>Caladenia brumalis</i>	Winter Spider-orchid	V	V	V	
<i>Caladenia cardiochila</i>	Heart-lip Spider-orchid			R	
<i>Caladenia carnea</i> var. <i>carnea</i>	Pink Fingers				
<i>Caladenia dilatata</i> complex	Green-comb Spider-orchid				
<i>Caladenia filamentosa</i> var. <i>tentaculata</i>	Wispy Spider-orchid				
<i>Caladenia fragrantissima</i> ssp. <i>fragrantissima</i>	Scented Spider-orchid		R	R	
<i>Caladenia latifolia</i>	Pink Caladenia				
<i>Caladenia patersonii</i> complex	White Spider-orchid				
<i>Caladenia stricta</i>	Upright Caladenia			R	
<i>Calandrinia brevipedata</i>	Short-stalked Purslane			K	
<i>Callitris canescens</i>	Scrubby Cypress Pine				
<i>Callitris preissii</i>	Southern Cypress Pine				
<i>Calytrix tetragona</i>	Common Fringe-myrtle				
<i>Carpobrotus rossii</i>	Native Pigface				
<i>Cassytha glabella</i> forma <i>dispar</i>	Slender Dodder-laurel				
<i>Cassytha melantha</i>	Coarse Dodder-laurel				
<i>Cassytha pubescens</i>	Downy Dodder-laurel				
<i>Centrolepis cephaloformis</i> ssp. <i>cephaloformis</i>	Cushion Centrolepis		R	E	
<i>Centrolepis polygyna</i>	Wiry Centrolepis			Q	
<i>Choretrum glomeratum</i>	Sour-bush				
<i>Chrysocephalum apiculatum</i>	Common Everlasting				
<i>Clematis microphylla</i>	Old Man's Beard				
<i>Comesperma volubile</i>	Love Creeper				
<i>Convolvulus erubescens</i>	Australian Bindweed				
<i>Correa pulchella</i>	Salmon Correa				
<i>Corybas despectans</i>	Coast Helmet-orchid				
<i>Corybas unguiculatus</i>	Small Helmet-orchid		R	K	❖
<i>Cotula vulgaris</i> var. <i>australasica</i>	Slender Cotula				
<i>Craspedia glauca</i>	Billy-buttons				
<i>Crassula decumbens</i> var. <i>decumbens</i>	Spreading Crassula				
<i>Crassula sieberiana</i> ssp. <i>tetramera</i>	Australian Stonecrop				
<i>Cyanicula deformis</i>	Bluebeard Orchid				
<i>Cyrtostylis robusta</i>	Robust Gnat-orchid				
<i>Danthonia caespitosa</i>	Common Wallaby-grass				
<i>Daucus glochidiatus</i>	Native Carrot				
<i>Daviesia benthamii</i> ssp. <i>humilis</i>	Mallee Bitter-pea		R	K	
<i>Dianella brevicaulis/revoluta</i> var.	Black-anther Flax-lily				
<i>Dichondra repens</i>	Kidney Weed				

Species	Common Name	Conservation Status			
		EPBC Act	NP&W Act	Regional	
				YP	❖
<i>Disphyma crassifolium</i> ssp. <i>clavellatum</i>	Round-leaf Pigface				
<i>Diuris</i> aff. <i>corymbosa</i>	Wallflower Donkey-orchid			R	
<i>Diuris palustris</i>	Little Donkey-orchid			U	
<i>Dodonaea bursariifolia</i>	Small Hop-bush			K	
<i>Dodonaea humilis</i>	Dwarf Hop-bush				
<i>Dodonaea viscosa</i>	Sticky Hop-bush				
<i>Drosera macrantha</i> ssp. <i>planchonii</i>	Climbing Sundew				
<i>Epilobium billardierianum</i> ssp. <i>x intermedium</i>	Variable Willow-herb			V	
<i>Eriochilus cucullatus</i>	Parson's Bands				
<i>Eriostemon pungens</i>	Prickly Wax-flower			U	
<i>Erodium crinitum</i>	Blue Heron's-bill				
<i>Eucalyptus 'anceps'</i>	Sessile-fruit White Mallee				
<i>Eucalyptus diversifolia</i>	Coastal White Mallee				
<i>Eucalyptus gracilis</i>	Yorrell				
<i>Eucalyptus incrassata</i>	Ridge-fruited Mallee				
<i>Eucalyptus leptophylla</i>	Narrow-leaf Red Mallee				
<i>Eucalyptus oleosa</i>	Red Mallee				
<i>Eucalyptus porosa</i>	Mallee Box				
<i>Eucalyptus rugosa</i>	Coastal White Mallee				
<i>Eucalyptus socialis</i>	Beaked Red Mallee				
<i>Euphrasia collina</i> ssp. <i>tetragona</i>	Coast Eyebright			U	
<i>Eutaxia microphylla</i> var. <i>microphylla</i>	Common Eutaxia				
<i>Exocarpos aphyllus</i>	Leafless Cherry				
<i>Exocarpos cupressiformis</i>	Native Cherry			U	
<i>Exocarpos sparteus</i>	Slender Cherry				
<i>Exocarpos syrticola</i>	Coast Cherry				
<i>Frankenia pauciflora</i>	Southern Sea-heath				
<i>Frankenia pauciflora</i> var. <i>fruticulosa</i>	Southern Sea-heath				
<i>Gahnia deusta</i>	Limestone Saw-sedge				
<i>Gahnia filum</i>	Smooth Cutting-grass			U	
<i>Gahnia lanigera</i>	Black Grass Saw-sedge				
<i>Galium gaudichaudii</i>	Rough Bedstraw			Q	
<i>Genoplesium nigricans</i>	Black Midge-orchid				
<i>Geranium retrorsum</i>	Grassland Geranium				
<i>Geranium solanderi</i> var. <i>solanderi</i>	Austral Geranium				
<i>Gnaphalium indutum</i>	Tiny Cudweed				
<i>Goodenia blackiana</i>	Native Primrose			U	
<i>Goodenia geniculata</i>	Bent Goodenia				
<i>Goodenia pinnatifida</i>	Cut-leaf Goodenia				
<i>Goodenia varia</i>	Sticky Goodenia				
<i>Goodia medicaginea</i>	Western Golden-tip			R	

Species	Common Name	Conservation Status			
		EPBC Act	NP&W Act	Regional	
				YP	❖
<i>Gyrostemon australasicus</i>	Buckbush Wheel-fruit			U	
<i>Gyrostemon thesioides</i>	Broom Wheel-fruit			R	
<i>Haegiela tatei</i>	Small Nut-heads		R	R	
<i>Haloragis acutangula</i>	Smooth Raspwort				
<i>Halosarcia flabelliformis</i>	Bead Samphire	V	V	T	
<i>Halosarcia halocnemoides</i> ssp. <i>halocnemoides</i>	Grey Samphire				
<i>Halosarcia indica</i> ssp. <i>bidens</i>	Brown-head Samphire			R	
<i>Halosarcia lepidosperma</i>			R	R	
<i>Halosarcia pergranulata</i> ssp. <i>pergranulata</i>	Black-seed Samphire			Q	
<i>Halosarcia syncarpa</i>	Fused Samphire			Q	
<i>Hardenbergia violacea</i>	Native Lilac				
<i>Helichrysum leucopsidum</i>	Satin Everlasting				
<i>Hibbertia riparia</i>	Guinea-flower				
<i>Hibbertia riparia</i> (<i>glabriuscula</i>)	Smooth Guinea-flower				
<i>Hibbertia sericea</i> var. <i>sericea</i>	Silky Guinea-flower				
<i>Hibbertia</i> sp. <i>A</i>	Port Lincoln Guinea-flower				
<i>Hibbertia</i> sp. <i>C</i>	Round-leaf Guinea-flower			U	
<i>Hibbertia virgata</i>	Twiggy Guinea-flower				
<i>Hydrocotyle callicarpa</i>	Tiny Pennywort			Q	
<i>Hydrocotyle capillaris</i>	Thread Pennywort				
<i>Hydrocotyle foveolata</i>	Yellow Pennywort			Q	
<i>Hydrocotyle medicaginoides</i>	Medic Pennywort			R	
<i>Hydrocotyle rugulosa</i>	Mallee Pennywort				
<i>Hypoxis glabella</i> var. <i>glabella</i>	Tiny Star				
<i>Isoetopsis graminifolia</i>	Grass Cushion				
<i>Isolepis cernua</i>	Nodding Club-rush			K	
<i>Isolepis marginata</i>	Little Club-rush				
<i>Isolepis nodosa</i>	Knobby Club-rush				
<i>Isolepis platycarpa</i>	Flat-fruit Club-rush			R	
<i>Isotoma scapigera</i>	Salt Isotome		R	R	
<i>Ixiolaena supina</i>	Coast Plover-daisy				
<i>Ixodia achillaeoides</i> ssp. <i>achillaeoides</i>	Coast Ixodia			U	
<i>Ixodia achillaeoides</i> ssp. <i>alata</i>	Hills Daisy			U	
<i>Juncus bufonius</i>	Toad Rush				
<i>Kennedia prostrata</i>	Scarlet Runner				
<i>Lasiopetalum discolor</i>	Coast Velvet-bush				
<i>Lasiopetalum schulzenii</i>	Drooping Velvet-bush				
<i>Lavatera plebeia</i>	Australian Hollyhock			K	
<i>Lawrencia spicata</i>	Salt Lawrencia			R	
<i>Lawrencia squamata</i>	Thorny Lawrencia				
<i>Lepidosperma congestum</i>	Clustered Sword-sedge				

Species	Common Name	Conservation Status			
		EPBC Act	NP&W Act	Regional	
				YP	❖
<i>Lepidosperma gladiatum</i>	Coast Sword-sedge				
<i>Lepidosperma viscidum</i>	Sticky Sword-sedge				
<i>Leptorhynchos scabrus</i>	Annual Buttons		R	R	
<i>Leptorhynchos squamatus</i>	Scaly Buttons				
<i>Leptorhynchos waitzia</i>	Button Immortelle				
<i>Leucophyta brownii</i>	Coast Cushion Bush				
<i>Leucopogon cordifolius</i>	Heart-leaf Beard-heath			R	
<i>Leucopogon parviflorus</i>	Coast Beard-heath				
<i>Linum marginale</i>	Native Flax				
<i>Lobelia gibbosa</i>	Tall Lobelia				
<i>Logania crassifolia</i>	Coast Logania				
<i>Logania ovata</i>	Oval-leaf Logania				
<i>Lomandra collina</i>	Sand Mat-rush				
<i>Lomandra effusa</i>	Scented Mat-rush				
<i>Lomandra micrantha</i> ssp. <i>micrantha</i>	Small-flower Mat-rush				
<i>Lotus australis</i>	Austral Trefoil				
<i>Lythrum hyssopifolia</i>	Lesser Loosestrife				
<i>Maireana oppositifolia</i>	Salt Bluebush				
<i>Melaleuca acuminata</i>	Mallee Honey-myrtle				
<i>Melaleuca decussata</i>	Totem-poles				
<i>Melaleuca gibbosa</i>	Slender Honey-myrtle			U	
<i>Melaleuca halmaturorum</i> ssp. <i>halmaturorum</i>	Swamp Paper-bark				
<i>Melaleuca lanceolata</i> ssp. <i>lanceolata</i>	Dryland Tea-tree				
<i>Microcybe pauciflora</i>	Yellow Microcybe			U	
<i>Microlaena stipoides</i> var. <i>stipoides</i>	Weeping Rice-grass				
<i>Microlepidium pilosulum</i>	Hairy Shepherd's-purse		R	K	
<i>Microseris lanceolata</i>	Yam Daisy				
<i>Microtis arenaria</i>	Notched Onion-orchid				
<i>Millotia muelleri</i>	Common Bow-flower				
<i>Millotia tenuifolia</i> var. <i>tenuifolia</i>	Soft Millotia				
<i>Minuria leptophylla</i>	Minnie Daisy				
<i>Muehlenbeckia adpressa</i>	Climbing Lignum				
<i>Myoporum insulare</i>	Common Boobialla				
<i>Myoporum parvifolium</i>	Creeping Boobialla		R	R	
<i>Myoporum viscosum</i>	Sticky Boobialla			R	
<i>Myosotis australis</i>	Austral Forget-me-not			Q	
<i>Neurachne alopecuroidea</i>	Fox-tail Mulga-grass				
<i>Nitraria billardierei</i>	Nitre-bush				
<i>Olearia axillaris</i>	Coast Daisy-bush				
<i>Olearia ciliata</i> var. <i>ciliata</i>	Fringed Daisy-bush				
<i>Olearia minor</i>	Heath Daisy-bush				

Species	Common Name	Conservation Status			
		EPBC Act	NP&W Act	Regional	
				YP	❖
<i>Olearia ramulosa</i>	Twiggy Daisy-bush				
<i>Olearia rudis</i>	Azure Daisy-bush			U	
<i>Opercularia turpis</i>	Twiggy Stinkweed				
<i>Opercularia varia</i>	Variable Stinkweed				
<i>Orobanche cernua</i> var. <i>australiana</i>	Australian Broomrape		V	V	
<i>Oxalis perennans</i>	Native Sorrel				
<i>Parietaria debilis</i>	Smooth-nettle				
<i>Pelargonium australe</i>	Australian Pelargonium				
<i>Pelargonium littorale</i>	Native Pelargonium				
<i>Phyllangium divergens</i>	Wiry Mitrewort				
<i>Phyllangium divergens/sulcatum</i>	Wiry Mitrewort				
<i>Picris angustifolia</i> ssp. <i>angustifolia</i>	Coast Picris			Q	
<i>Pimelea flava</i> ssp. <i>dichotoma</i>	Diosma Riceflower				
<i>Pimelea glauca</i>	Smooth Riceflower				
<i>Pimelea microcephala</i> ssp. <i>microcephala</i>	Shrubby Riceflower			Q	
<i>Pimelea subvillifera</i>	Silky Riceflower			T	
<i>Pittosporum phylliraeoides</i> var. <i>microcarpa</i>	Native Apricot				
<i>Plantago drummondii</i>	Dark Plantain				
<i>Plantago gaudichaudii</i>	Narrow-leaf Plantain			K	
<i>Poa drummondiana</i>	Knotted Poa		R	K	
<i>Poa fax</i>	Scaly Poa		R	R	
<i>Poa poiformis</i>	Coast Tussock-grass				
<i>Podolepis canescens</i>	Grey Copper-wire Daisy			U	
<i>Podolepis rugata</i>	Pleated Copper-wire Daisy				
<i>Podolepis rugata</i> var. <i>littoralis</i>	Coast Copper-wire Daisy			R	
<i>Podotheca angustifolia</i>	Sticky Long-heads				
<i>Pogonolepis muelleriana</i>	Stiff Cup-flower			U	
<i>Pomaderris obcordata</i>	Wedge-leaf Pomaderris				
<i>Pomaderris paniculosa</i>					
<i>Pomaderris paniculosa</i> ssp. <i>paniculosa</i>	Mallee Pomaderris				
<i>Poranthera microphylla</i>	Small Poranthera			Q	
<i>Poranthera triandra</i>	Three-petal Poranthera			U	
<i>Prasophyllum "carnosum"</i>				R	
<i>Prasophyllum calcicola</i>	Limestone Leek-orchid		V	V	
<i>Prasophyllum fitzgeraldii</i>	Fitzgerald's Leek-orchid			V	
<i>Prasophyllum occidentale</i>	Plains Leek-orchid			K	
<i>Prasophyllum odoratum</i>	Scented Leek-orchid				
<i>Prasophyllum odoratum complex</i>	Leek-orchid				
<i>Prostanthera serpyllifolia</i> ssp. <i>microphylla</i>	Small-leaf Mintbush			V	
<i>Prostanthera serpyllifolia</i> ssp. <i>microphylla</i> (purplish-green flowers)	Small-leaf Mintbush			V	

Species	Common Name	Conservation Status			
		EPBC Act	NP&W Act	Regional	
				YP	❖
<i>Prostanthera serpyllifolia</i> ssp. <i>serpyllifolia</i>	Thyme Mintbush			R	
<i>Prostanthera serpyllifolia</i> ssp. <i>serpyllifolia</i> (purplish-green flowers)	Thyme Mintbush			R	
<i>Pseudognaphalium luteoalbum</i>	Jersey Cudweed				
<i>Pterostylis erythroconcha</i>	Red Shell-orchid			U	
<i>Pterostylis longifolia</i>	Tall Greenhood				
<i>Pterostylis nana</i>	Dwarf Greenhood			Q	
<i>Pterostylis pedunculata</i>	Maroon-hood			U	
<i>Pterostylis plumosa</i>	Bearded Greenhood			Q	
<i>Pterostylis robusta</i>	Large Shell-orchid				
<i>Pterostylis sanguinea</i>	Blood Greenhood				
<i>Ptilotus spathulatus</i> forma <i>spathulatus</i>	Pussy-tails				
<i>Puccinellia stricta</i> var. <i>stricta</i>	Australian Saltmarsh-grass				
<i>Pultenaea acerosa</i>	Bristly Bush-pea			U	
<i>Pultenaea rigida</i> var. <i>ovata</i>	Rigid Bush-pea			U	
<i>Pultenaea rigida</i> var. <i>rigida</i>	Rigid Bush-pea			U	
<i>Pultenaea tenuifolia</i>	Narrow-leaf Bush-pea				
<i>Pultenaea vestita</i>	Feather Bush-pea			R	
<i>Pultenaea villifera</i> var. <i>glabrescens</i>	Splendid Bush-pea	V	V	V	❖
<i>Ranunculus pumilio</i> var. <i>pumilio</i>	Ferny Buttercup			R	
<i>Ranunculus sessiliflorus</i> var. <i>pilulifer</i>	Annual Buttercup		V	K	
<i>Ranunculus sessiliflorus</i> var. <i>sessiliflorus</i>	Annual Buttercup			U	
<i>Rhagodia candolleana</i> ssp. <i>candolleana</i>	Sea-berry Saltbush				
<i>Rhagodia crassifolia</i>	Fleshy Saltbush				
<i>Rumex brownii</i>	Slender Dock			R	
<i>Samolus repens</i>	Creeping Brookweed				
<i>Santalum acuminatum</i>	Quandong				
<i>Sarcocornia blackiana</i>	Thick-head Samphire				
<i>Sarcocornia quinqueflora</i>	Beaded Samphire				
<i>Scaevola angustata</i>	Coast Fanflower			U	
<i>Scaevola crassifolia</i>	Cushion Fanflower				
<i>Schoenus deformis</i>	Small Bog-rush			U	
<i>Schoenus nitens</i>	Shiny Bog-rush			R	
<i>Scleranthus pungens</i>	Prickly Knawel				
<i>Sclerostegia arbuscula</i>	Shrubby Samphire				
<i>Sebaea ovata</i>	Yellow Sebaea				
<i>Senecio glossanthus</i>	Annual Groundsel				
<i>Senecio lautus</i>	Variable Groundsel				
<i>Senecio picridioides</i>	Purple-leaf Groundsel			U	
<i>Senecio quadridentatus</i>	Cotton Groundsel			R	
<i>Solanum symonii</i>	Symon's Kangaroo-apple				

Species	Common Name	Conservation Status			
		EPBC Act	NP&W Act	Regional	
				YP	❖
<i>Sonchus hydrophilus</i>	Native Sow-thistle				
<i>Sonchus megalocarpus</i>	Coast Sow-thistle				
<i>Spinifex hirsutus</i>	Rolling Spinifex				
<i>Spinifex sericeus</i>	Rolling Spinifex				
<i>Spyridium leucopogon</i>	Silvery Spyridium		R	K	❖
<i>Spyridium phycoides</i>	Narrow-leaf Spyridium				
<i>Stackhousia annua</i>	Annual Candles	V	V	V	
<i>Stackhousia aspericocca</i> ssp. " <i>Cylindrical inflorescence</i> "(W.R.Barker 1418)	Bushy Candles				
<i>Stackhousia aspericocca</i> ssp. " <i>One-sided inflorescence</i> "(W.R.Barker 697)	One-sided Candles				
<i>Stackhousia monogyna</i>	Creamy Candles				
<i>Stackhousia spathulata</i>	Coast Candles			K	
<i>Stenopetalum lineare</i>	Narrow Thread-petal				
<i>Stipa echinata</i>	Spiny Spear-grass		R	R	
<i>Stipa elegantissima</i>	Feather Spear-grass				
<i>Stipa eremophila</i>	Rusty Spear-grass				
<i>Stipa flavescens</i>	Coast Spear-grass				
<i>Stipa multispiculis</i>			R	K	
<i>Stipa stipoides</i>	Coast Spear-grass			U	
<i>Stuartina muelleri</i>	Spoon Cudweed				
<i>Stylidium calcaratum</i>	Spurred Trigger-plant			R	
<i>Suaeda australis</i>	Austral Seablite				
<i>Templetonia retusa</i>	Cockies Tongue				
<i>Tetragonia implexicoma</i>	Bower Spinach				
<i>Tetragonia tetragonioides</i>	New Zealand Spinach				
<i>Thelymitra antennifera</i>	Lemon Sun-orchid				
<i>Thelymitra nuda</i>	Scented Sun-orchid				
<i>Threlkeldia diffusa</i>	Coast Bonefruit				
<i>Thysanotus baueri</i>	Mallee Fringe-lily			K	
<i>Thysanotus patersonii</i>	Twining Fringe-lily				
<i>Trachymene pilosa</i>	Dwarf Trachymene				
<i>Tricoryne tenella</i>	Tufted Yellow Rush-lily				
<i>Triglochin centrocarpum</i>	Dwarf Arrowgrass				
<i>Triglochin minutissimum</i>	Tiny Arrowgrass		R	R	
<i>Triglochin mucronatum</i>	Prickly Arrowgrass			Q	
<i>Triodia compacta</i>	Spinifex			U	
<i>Triodia irritans complex</i>	Spinifex				
<i>Triptilodiscus pygmaeus</i>	Small Yellow-heads				
<i>Velleia arguta</i>	Toothed Velleia				
<i>Veronica hillebrandii</i>	Rigid Speedwell				

Species	Common Name	Conservation Status			
		EPBC Act	NP&W Act	Regional	
				YP	❖
<i>Vittadinia australasica</i>	Sticky New Holland Daisy				
<i>Vittadinia dissecta</i> var. <i>hirta</i>	Dissected New Holland Daisy				
<i>Vittadinia megacephala</i>	Giant New Holland Daisy				
<i>Wahlenbergia communis</i>	Tufted Bluebell			Q	
<i>Wahlenbergia gracilentata</i>	Annual Bluebell				
<i>Westringia eremicola</i>	Slender Westringia			R	
<i>Wilsonia backhousei</i>	Narrow-leaf Wilsonia			R	
<i>Wilsonia humilis</i> var. <i>humilis</i>	Silky Wilsonia			U	
<i>Wurmbea dioica</i> ssp. <i>dioica</i>	Early Nancy				
<i>Zygophyllum ammophilum</i>	Sand Twinleaf				
<i>Zygophyllum apiculatum</i>	Pointed Twinleaf			Q	
<i>Zygophyllum billardierei</i>	Coast Twinleaf				
	333	4	24	115	3

Note: See Appendix E for Regional and Conservation Status Codes.

APPENDIX D : INNES NATIONAL PARK – NATIVE BIRD SPECIES

Species	Common Name	Conservation Status		
		EPBC Act	NP&W Act	Regional YP
Australasian Gannet	<i>Morus serrator</i>			
Australasian Grebe, (Little Grebe)	<i>Tachybaptus novaehollandiae</i>			
Australian Magpie	<i>Gymnorhina tibicen</i>			
Australian Pelican	<i>Pelecanus conspicillatus</i>			
Australian Raven	<i>Corvus coronoides</i>			
Australian Ringneck, (Ring-necked Parrot)	<i>Barnardius zonarius</i>			
Australian Shelduck	<i>Tadorna tadornoides</i>			
Banded Stilt	<i>Cladorhynchus leucocephalus</i>			
Black Falcon	<i>Falco subniger</i>			U
Black-faced Cormorant	<i>Phalacrocorax fuscescens</i>			
Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>			
Black-shouldered Kite	<i>Elanus axillaris</i>			
Black-winged Stilt	<i>Himantopus himantopus</i>			
Blue Bonnet	<i>Northiella haematogaster</i>			U
Brown Falcon	<i>Falco berigora</i>			
Brown Goshawk	<i>Accipiter fasciatus</i>			
Brown Thornbill	<i>Acanthiza pusilla</i>			
Brown-headed Honeyeater	<i>Melithreptus brevirostris</i>			
Brush Bronzewing	<i>Phaps elegans</i>			U
Caspian Tern	<i>Sterna caspia</i>			
Chestnut Quail-thrush	<i>Cinclosoma castanotus</i>		R	R
Chestnut Teal	<i>Anas castanea</i>			U
Collared Sparrowhawk	<i>Accipiter cirrhocephalus</i>			
Common Bronzewing	<i>Phaps chalcoptera</i>			
Common Sandpiper	<i>Actitis hypoleucos</i>			
Crested Bellbird	<i>Oreoica gutturalis</i>			V
Crested Pigeon	<i>Ocyphaps lophotes</i>			
Crested Tern	<i>Sterna bergii</i>			
Dusky Woodswallow	<i>Artamus cyanopterus</i>			
Eastern Reef Egret	<i>Ardea sacra</i>		R	R
Emu	<i>Dromaius novaehollandiae</i>			V
Fairy Tern	<i>Sterna nereis</i>		V	V
Fan-tailed Cuckoo	<i>Cacomantis flabelliformis</i>			
Fork-tailed Swift	<i>Apus pacificus</i>			
Galah	<i>Cacatua roseicapilla</i>			
Golden Whistler	<i>Pachycephala pectoralis</i>			
Great Cormorant	<i>Phalacrocorax carbo</i>			
Great Skua	<i>Catharacta skua</i>			
Grey Butcherbird	<i>Cracticus torquatus</i>			
Grey Currawong	<i>Strepera versicolor</i>			

Species	Common Name	Conservation Status		
		EPBC Act	NP&W Act	Regional YP
Grey Fantail	<i>Rhipidura albiscapa</i>			
Grey Plover	<i>Pluvialis squatarola</i>			
Grey Shrike-thrush	<i>Colluricincla harmonica</i>			
Grey Teal	<i>Anas gracilis</i>			
hooded plover	<i>Thinornis rubricollis</i>		V	V
Horsfield's Bronze-cuckoo	<i>Chrysococcyx basalis</i>			
Inland Thornbill	<i>Acanthiza apicalis</i>			
Little Button-quail	<i>Turnix velox</i>			
Little Penguin	<i>Eudyptula minor</i>			
Little Pied Cormorant	<i>Phalacrocorax melanoleucos</i>			
Little Raven	<i>Corvus mellori</i>			
little tern	<i>Sterna albifrons</i>		V	V
Magpie-lark	<i>Grallina cyanoleuca</i>			
Malleefowl	<i>Leipoa ocellata</i>	V	V	E
Masked Lapwing	<i>Vanellus miles</i>			
Mulga Parrot	<i>Psephotus varius</i>			V
Nankeen Kestrel	<i>Falco cenchroides</i>			
New Holland Honeyeater	<i>Phylidonyris novaehollandiae</i>			
Osprey	<i>Pandion haliaetus</i>		R	R
Pacific Black Duck	<i>Anas superciliosa</i>			
Pacific Gull	<i>Larus pacificus</i>			U
Painted Button-quail	<i>Turnix varia</i>		V	V
Peregrine Falcon	<i>Falco peregrinus</i>		R	R
Pied Cormorant	<i>Phalacrocorax varius</i>			
Pied Oystercatcher	<i>Haematopus longirostris</i>			U
Purple-crowned Lorikeet	<i>Glossopsitta porphyrocephala</i>			
Purple-gaped Honeyeater	<i>Lichenostomus cratitius</i>			V
Rainbow Lorikeet	<i>Trichoglossus haematodus</i>			U
Red Wattlebird	<i>Anthochaera carunculata</i>			
Red-capped Plover	<i>Charadrius ruficapillus</i>			
Red-necked Stint	<i>Calidris ruficollis</i>			
Richard's Pipit	<i>Anthus novaeseelandiae</i>			
Rock Parrot	<i>Neophema petrophila</i>		R	R
Ruddy Turnstone	<i>Arenaria interpres</i>			
Rufous Fieldwren	<i>Calamanthus campestris</i>			U
Scarlet Robin	<i>Petroica multicolor</i>			
Shining Bronze-Cuckoo	<i>Chrysococcyx lucidus</i>		R	R
Shy Heathwren (Shy Hylacola)	<i>Calamanthus cautus</i>			
Silver Gull	<i>Larus novaehollandiae</i>			
Silvereye	<i>Zosterops lateralis</i>			
Singing Honeyeater	<i>Lichenostomus virescens</i>			

Species	Common Name	Conservation Status		
		EPBC Act	NP&W Act	Regional YP
Sooty Oystercatcher	<i>Haematopus fuliginosus</i>			
Southern Boobook	<i>Ninox novaeseelandiae</i>			
Southern Giant-Petrel	<i>Macronectes giganteus</i>			
Southern Scrub-robin	<i>Drymodes brunneopygia</i>			V
Southern Whiteface	<i>Aphelocephala leucopsis</i>			E
Spiny-cheeked Honeyeater	<i>Acanthagenys rufogularis</i>			
Spotted Harrier	<i>Circus assimilis</i>			
Spotted Nightjar	<i>Eurostopodus argus</i>			E
Spotted Pardalote	<i>Pardalotus punctatus</i>			
Striated Fieldwren	<i>Calamanthus fuliginosus</i>			
Striated Pardalote	<i>Pardalotus striatus</i>			
Stubble Quail	<i>Coturnix pectoralis</i>			
Superb Fairy-wren	<i>Malurus cyaneus</i>			U
Tawny Frogmouth	<i>Podargus strigoides</i>			U
Tawny-crowned Honeyeater	<i>Gliciphila melanops</i>			U
Variegated Fairy-wren	<i>Malurus lamberti</i>			
Wedge-tailed Eagle	<i>Aquila audax</i>			
Welcome Swallow	<i>Hirundo neoxena</i>			
Western Whipbird	<i>Psophodes nigrogularis leucogaster</i>		V	V
Whistling Kite	<i>Haliastur sphenurus</i>			
white-bellied sea-eagle	<i>Haliaeetus leucogaster</i>		V	V
White-browed Babbler	<i>Pomatostomus superciliosus</i>			
White-browed Scrubwren	<i>Sericornis frontalis</i>			
White-faced Heron	<i>Egretta novaehollandiae</i>			
White-fronted Chat	<i>Epthianura albifrons</i>			
White-fronted Honeyeater	<i>Phylidonyris albifrons</i>			U
White-winged Chough	<i>Corcorax melanorhamphos</i>			
Willie Wagtail	<i>Rhipidura leucophrys</i>			
Yellow-plumed Honeyeater	<i>Lichenostomus ornatus</i>			V
Yellow-rumped Thornbill	<i>Acanthiza chrysorrhoa</i>			
	111	1	13	33

APPENDIX E : CONSERVATION STATUS CODES

Australian Conservation Status Codes

The following codes are based on the current listing of species under Section 179 of the *Environmental Protection and Biodiversity Conservation Act 1999*.

- EX Extinct:** there is no reasonable doubt that the last member of the species has died.
- EW Extinct in the Wild:** known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
- CE Critically Endangered:** facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
- E Endangered:** facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
- V Vulnerable:** facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
- CD Conservation Dependent:** the species is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

Note: Prescribed criteria as defined under the IUCN Red List of Threatened Species.

South Australian Conservation Status Codes

The following codes are based on the current listing of species under Schedules of the *National Parks and Wildlife Act 1972*, as amended in 2000.

- E Endangered:** (Schedule 7) in danger of becoming extinct in the wild.
- V Vulnerable:** (Schedule 8) at risk from potential or long term threats which could cause the species to become endangered in the future.
- R Rare:** (Schedule 9) low overall frequency of occurrence (may be locally common with a very restricted distribution or may be scattered sparsely over a wider area). Not currently exposed to significant threats, but warrants monitoring and protective measures to prevent reduction of population sizes.

Regional Status Codes

The categories below apply to the species distribution at a regional level.

Mammals, Reptiles & Amphibians

There are no regional conservation status categories developed for mammals, reptiles or amphibians to date (2003).

Birds

Regional conservation status for birds follow Carpenter and Reid (1998) *The Status of Native Birds in the Agricultural Areas of South Australia*;

The regions are defined as follows;

ML	Mount Lofty	MN	Mid-North	SE	South-Eastern	KI	Kangaroo Island
MM	Murray Mallee	EP	Eyre Peninsula	YP	Yorke Peninsula		

Plants

Regional conservation ratings for plants follow:

Lang, P.J. & Kraehenbuehl, D.N. (2001). Plants of Particular Conservation Significance in South Australia's Agricultural Regions.

June (2003) update of unpublished database: Florlist. Department for Environment and Heritage.

The regions are as defined by the State Herbarium (Plant Biodiversity Centre), illustrated in the back cover of 'A List of the Vascular Plants of South Australia (Edition IV)' (Ed. Jessop, 1993).

NW North-Western	FR Flinders Ranges	NL Northern Lofty	SL Southern Lofty
LE Lake Eyre	EA Eastern	MU Murray	KI Kangaroo Island
NU Nullarbor	EP Eyre Peninsula	YP Yorke Peninsula	SE South-Eastern
GT Gairdner-Torrens			

In order of decreasing conservation significance:

- X Extinct/Presumed extinct:** not located despite thorough searching of all known and likely habitats; known to have been eliminated by the loss of localised population(s); or not recorded for more than 50 years from an area where substantial habitat modification has occurred.
- E Endangered:** rare and in danger of becoming extinct in the wild.
- T Threatened:** (*Plants only*) likely to be either Endangered or Vulnerable but insufficient data available for more precise assessment.
- V Vulnerable:** rare and at risk from potential threats or long term threats that could cause the species to become endangered in the future.
- K Uncertain:** likely to be either Threatened or Rare but insufficient data available for a more precise assessment.
- R Rare:** has a low overall frequency of occurrence (may be locally common with a very restricted distribution or may be scattered sparsely over a wider area). Not currently exposed to significant or widespread threats, but warrants monitoring and protective measures to prevent reduction of population sizes.
- U Uncommon:** less common species of interest but not rare enough to warrant special protective measures.
- Q Not yet assessed:** but flagged as being of possible significance.
- N Not of particular significance** (*Plants only*) Also indicated by a blank entry.
- C Common** (*Birds only*) Also indicated by a blank entry.
- O Occasional Visitor Only** (*Birds only*) Not considered of conservational status.

APPENDIX F : KANGAROO COUNTS 1978-1997**Innes National Park Kangaroo Counts 1978-1997**

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1978		80	52	12		24	22	31	66	65	52	55
1979	18	24	21	20	33	26	28	34	27	39	53	27
1980	33	36	27	35	26	33	36				88	19
1981	21	24	37	37	33		16	27	28		23	
1982		14										
1983												
1984			58	60	50	76	57	17	42	64	89	42
1985	30	38	23	52	66	48	46	45	46		57	62
1986	30	33	26	17	76	26	12	29	50	52	59	44
1987	30	38	13	17	13	46	49	39	53	83	73	46
1988	16	21	41	15	65	76	44	49	27	106	23	36
1989												
1990												
1991	11	12	30	15	48	92		22	22	42	9	55
1992			17	53	87	45	38	33	63	91	100	71
1993		30	28	0	15	109	21	31	73	29	51	39
1994	21					14	29		46		32	
1995		55	44		30	22	20	21		25	24	21
1996	31	40		24				15	27	39	72	
1997				28	71			49				

